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Germain Grisez's natural law and creation theology as a framework for reflection on climate change and the ecological crisis

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by

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Abstract

My thesis is that a recovery of Germain Grisez's theological ethics in relation to the environment and the application of his conservative Catholic methodology to climate change can yield a novel and significant contribution to Catholic theological reflection on this central challenge in an age of ecological crisis.

This thesis argues that climate change and the wider ecological crisis are 'signs of the times'—and hence are appropriate issues for Catholic theological reflection—both in principle and on the basis of their classification as such within the authoritative teaching of the Church's magisterium. The scientific evidence for the phenomenon of anthropogenic global warming is robust and the UNFCCC establishes a collective legal obligation to deliver a greenhouse gas abatement strategy rigorous enough to prevent 'dangerous anthropogenic interference with the earth's climatic system'.

This thesis questions both the assumption of endemic anthropocentricism in the Judeo-Christian tradition and the critical-revisionist methodology adopted by a number of ecotheologians in relation to Vatican teaching on the basis of this assumption. This thesis proposes an alternative approach to reflection on ecological issues employing a conservative Catholic theological method exemplified in the work of Germain Grisez.

This thesis proposes a rereading of Grisez's natural law through the lens of his creation theology that reveals an important and hitherto overlooked resource for environmental ethics. Although Grisez himself does not address the climate challenge in his published work, this thesis shows that his ecological insights are pertinent to the issue and application of his theological method can contribute constructively to the wider project of confronting the climate crisis from a Catholic perspective.

This thesis further argues that Grisez's reconstruction of natural law is viable, in that it represents one philosophically cogent solution to the naturalistic fallacy, and that neither his choice of this solution nor his divergence from Classical Thomism compromise the construction of a 'Grisez School environmental ethics'. In addition, his natural law has the virtue of catholicity in its capacity to contribute to ecumenical and secular debates necessary to the resolution of the climate crisis.

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Chapter One: Introduction

General introduction and research question

Every project in theology begins with a personal story about the set of circumstances in one individual's life that birthed the motivation to reflect on a particular problem. For example, for Alex Evans this personal story is of a journey from a loss of faith in the capacity of rational, evidence-based arguments to persuade governments of the need to take radical action to build a fairer more sustainable world, to the belief that a Christian vision of covenant, atonement and renewal might have the potential to succeed where our politics appears to be failing us.[1] My own intellectual journey has some similarities to Evans's: as a science graduate I was interested in the technical aspects of the climate challenge and later—at law school—I was much influenced by John Finnis's *Natural Law and Natural Rights* and fascinated by what I saw as the implications of leading cases in English Tort law[2] for global issues like climate change. The need to put these thoughts into theological context was brought home to me some years later, when my autistic son Ben—then five years old—became distressed about species extinction after watching a David Attenborough documentary on climate change. An issue I had been approaching scientifically as a dispassionate observer crystalized, as a result of this experience, into something that matters to me spiritually as a Christian and personally as a woman and as a mother.

I had the privilege of presenting a poster on Germain Grisez and climate change at the 2010 'Theological Ethics in the World Church' Conference held at Trento in Italy.[3] It was there that I realised the extent to which my personal history as an immigrant from Zimbabwe influenced my deeply held concerns about this issue. Zimbabwe is ranked amongst the world's most climate-vulnerable states, facing serious threats to food production in a largely agricultural-based economy as the planet warms, as well as increasingly unpredictable rainfall and extreme weather events. My sense of connection with Zimbabwe and empathy with the people there remains undimmed by the passing years despite limited opportunities to visit the land of my birth.

However, last October I was able to visit Action Aid Zimbabwe as part of a project to assist climate refugees displaced by flooding near the Tokwe-Mukosi dam in Masvingo. Ben—now grown up and training to be a photographer—travelled with us to the Chingwizi area where the displaced people are still living in desperate circumstances. We saw first-hand the effects of our changing climate on a vulnerable population. One enduring memory which Ben captured on camera is of two small children carrying water for many miles across the arid landscape because the boreholes closer to home had dried up. We also heard stories of small children braving long walks, through bushland inhabited by wild animals, to makeshift schools facing drastic shortages of books and equipment. And we witnessed an acute food-security crisis unfolding as political rows over the future of the displaced people left them in conditions of prolonged destitution.

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[1] Alex Evans, 'The eternal covenant, atonement and environmental restoration', *Modern Believing*, 54.4 (October 2013), pp. 318–327.

[2] See especially *Cambridge Water v Eastern Counties Leather* http://www.e-lawresources.co.uk/cases/Cambridge-Water-v-Eastern-Counties-Leather.php [accessed 13 October 2015].

[3] Jacaranda Turvey, 'Natural Law and Ecological Conversion', Poster Presentation, Catholic Theological Ethics in the World Church Conference, 'In the Currents of History: From Trent to the Future', Trento, Italy, 24–27 July 2010.

It would be an understatement to admit that I do not have all the answers to even this one example of tragedy currently affecting a group of people profoundly disadvantaged by climate vulnerability. But if we are to reflect theologically on climate change we must begin with empathy for those vulnerable populations imperilled in a warming world. We need to have the courage to walk amongst them and see the world through their eyes. Only then will we be enabled by grace to discern the contribution each of us can make to moral theology in the Anthropocene based on our personal experience and reflection.

Aims

This project begins with the research question 'how might Germain Grisez's natural law and creation theology contribute to the project of articulating a Roman Catholic response to the climate challenge?' Central to my response to this question is a recovery of Grisez's thought on the environment and a defence of his position in the face of environmentalist and theological critiques. I hope to show that the new natural law theory developed by Grisez and his collaborators provides a cogent theological framework for environmental engagement and to demonstrate the application of this framework to contested issues of climate justice.

Rationale

As many scholars have pointed out, climate change is difficult to theorise within the commonly utilised moral frameworks: the effects of carbon pollution are indirect and non-localised such that those vulnerable to its effects are geographically and culturally distant from those most responsible for greenhouse gas stocks in the atmosphere and include generations as yet unborn. The gases involved are not 'toxic' in the normal sense of the word, yet their cumulative effects are profound. Furthermore the consumption of fossil fuels is so imbedded in the lifestyles of industrialised nations that its moral dimension is hidden from us in the same way that the human cost of slavery was invisible to the inhabitants of societies whose economies depended on slave trading. Discussion of the problem has tended to be highly technical and abstract—excluding non-specialists from the conversation—and climate politics has been dogged by 'Giddens's Paradox': 'since the dangers posed by global warming aren't tangible, immediate or visible in the course of everyday life, however awesome they appear, many will sit on their hands and do nothing of a concrete nature about them. Yet waiting until they become visible and acute before being stirred to serious action will, by definition, be too late.'[4]

As I shall show, the Catholic Church views climate change not as a purely technical problem—to be addressed by experts in science and economics—nor as an amoral but politically partisan issue where one might reasonably choose sides based on established political allegiances and worldviews without conscientious engagement. Rather, the environmental crisis 'has reached such proportions as to be the moral responsibility of everyone'[5]—as Pope Saint John Paul II had already discerned back in 1990—and climate change is a 'sign of the times' requiring urgent reflection and an essentially human issue, linked to the security and flourishing of all the families and living

[4] Anthony Giddens, *The Politics of Climate Change* (Cambridge: Polity Press, 2009), p. 2.

[5] John Paul II, Message for the Celebration of the World Day of Peace 1 January 1990, #15 https://w2.vatican.va/content/john-paul-ii/en/messages/peace/documents/hf_jp-ii_mes_19891208_xxiii-world-day-for-peace.html [accessed 13 October 2015].

communities on the earth.[6] It is a question of integral ecology, in which respect for the dignity of the human person is inseparable from concern for the flourishing of creation. A natural law approach to the problem holds out the promise of finding common ground with people of good will beyond the Christian community, an approach well suited to addressing a global problem, and flourishing is a key concept in Grisez's natural law theory. Hence my expectation at the commencement of this project was that I would find an extensive secondary literature on Grisez's ecological reflection and numerous critiques of his position. It was therefore surprising to find a paucity of material on the subject and no literature at all on the possible application of his work to the global climate challenge.

Grisez is a major figure in Catholic theological ethics; his encyclopaedic work in the field has been enormously influential, especially in politically conservative Catholic circles in the United States—a demographic that has been notably disengaged from environmental issues in public discourse.[7] One indication of this disengagement is that Princeton Professor of Law, Robert George—arguably Grisez's most influential disciple—provides no substantial discussion of his mentor's views on environmental ethics in his collection of essays *In Defense of Natural Law*.[8] Jeremy Waldron opines that George has 'done more than anyone else in modern jurisprudence to explore the implications of natural law for American constitutional structures and for issues of public policy and public morality' and *The New York Times* has described him as the country's most influential conservative Christian thinker.[9] Clearly there is a lacuna in conservative Catholic thought on the environment and it is this gap in the literature that this thesis seeks to address.

Methodology

My methodological approach has been to examine key texts in order to present a recovery of Grisez's integral ecology, to defend his position against critiques advanced by environmentalist and theological interlocutors and to apply his thought to contested climate justice issues. Database searches revealed no primary or secondary literature on the application of Grisez's natural law to problems in climate ethics. I have chosen to concentrate on Grisez's systematic presentation of his thought in the first two volumes of *The Way of the Lord Jesus.*[10] In particular, Chapter 10 of *Living a Christian Life*—on work, subhuman realities and property[11]—is an essential point of reference for Grisez's environmental ethics and I have found it important to read the chapter carefully in its entirety in order to get an overview of the connections between these issues in Grisez's thought. Other scholars who have paid little attention to the sections on work and property have overlooked

[6] Erin Lothes Biviano, David Cloutier, Elaine Padilla, Christiana Z. Peppard, Jame Schaefer, 'Catholic Moral Traditions and Energy Ethics for the Twenty-First Century', *Journal of Moral Theology*, 5.2 (2016) pp. 1–36, at pp. 6–7.

[7] According to Erin Lothes Biviano *et al.* 'middle and upper-middle class Americans are the single most important group of people to "convert" on issues of energy ethics, because—as many contemporary ethicists agree—they "probably have much more economic power than the vast majority of people on the planet"', quoting James Garvey, *The Ethics of Climate Change* (New York: Continuum, 2008), p.141; see also Willis Jenkins, *The Future of Ethics* (New York: Oxford University Press, 2013).

[8] Robert P. George, *In Defense of Natural Law* (New York: Oxford University Press, 1999).

[9] David D. Kirkpatrick, 'The Conservative-Christian Big Thinker' *The New York Times Magazine*, 16 December 2009 http://www.nytimes.com/2009/12/20/magazine/20george-t.html?pagewanted=all&_r=0 [accessed 11/6/2015].

[10] Germain Grisez, *The Way of the Lord Jesus*, Volume 1: *Christian Moral Principles* (Chicago: Franciscan Herald Press, 1983); Volume 2, *Living a Christian Life* (Quincy, Illinois: Franciscan Press, 1993).

[11] Grisez, *Living a Christian Life*, Chapter 10: 'Work, subhuman realities and property', pp. 753–834.

a valuable resource for ecological ethics. Examination of key texts from Grisez's *oeuvre* is supplemented as necessary with reference to John Finnis's slightly different formulation of the theory in *Natural Law and Natural Rights*,[12] and the comprehensive restatement of the core of the new natural law theory written by Grisez, Finnis and Boyle—*Practical Principles, Moral Truth and Ultimate Ends*[13]—which Nigel Biggar and Rufus Black recommend as 'the central point of reference for analysing their theory.'[14] Biggar and Black's collection of essays *The Revival of Natural Law* has been another important source,[15] presenting a number of valuable contemporary scholarly responses to the Finnis-Grisez School. In applying Grisez's ethics to climate justice issues I have attempted to abstract principles relevant to the task and re-examine some central justice questions in the light of these principles.

My thesis is that a recovery of Germain Grisez's thought on the environment reveals an integral ecology that pervades his theological ethics. Application of principles abstracted from Grisez's thought to the climate challenge as a 'sign of the times' enables me to construct a Grisez School conception of climate justice. Notwithstanding theological critiques of Grisez's theory—including those of prominent Catholic Thomist scholars Jean Porter and Ralph McInerny—I demonstrate that the new natural law is a philosophically coherent and theologically cogent ethical system and its deployment as an analytical tool in our context of ecological crisis makes a timely and important contribution to Catholic ecotheology.

Argument:

In order to establish the rationale for this research project, I argue that the scientific evidence for the phenomenon of anthropogenic global warming is robust, notwithstanding two apparently plausible objections to its validity. Given the scale of the challenge as a technical, economic and political undertaking I argue that a large-scale societal engagement with the global low-carbon transition project is required, necessitating a paradigm shift in public discourse to reframe the issue as a question of fundamental values including religious commitments. I further argue that climate change is rightly characterised as a 'sign of the times' both in principle and in practice as revealed by treatment of the issue by the magisterium and the bishops of the Church within a well-developed existing corpus of social teaching on the issue. Hence within this reframing there is a role for faithful Roman Catholic reflection, advocacy and community action towards a collective response to the crisis. This thesis aims to contribute a new voice to this discussion based on the application of Germain Grisez's theological ethics to the climate challenge. Leading contributors to the debate on the ecological crisis within Roman Catholic moral theology have adopted a critical/creative methodology; this thesis looks instead to Grisez's dialectical approach as an alternative methodology, seeking to bring the light of faith and insights from the documentary heritage of the Church's teaching authority to bear in analysing the issue and formulating a faithful response.

[12] John Finnis, *Natural Law and Natural Rights* (Oxford: Clarendon Press, 1987).

[13] Germain Grisez, Joseph Boyle and John Finnis, 'Practical Principles, Moral Truth and Ultimate Ends', *The American Journal of Jurisprudence* 32 (1987), pp. 99–151.

[14] Nigel Biggar and Rufus Black, 'Preface' in: *The Revival of Natural Law: Philosophical, theological and ethical responses to the Finnis-Grisez School*, edited by Nigel Biggar and Rufus Black (Aldershot: Ashgate, 2000), pp. xiii–xvii., at p. xvi.

[15] Biggar and Black, *The Revival of Natural Law*.

This thesis argues for a re-reading of Germain Grisez's theological ethics through the lens of his creation theology. I seek to demonstrate that a careful analysis of Grisez's thought on the interrelation between the ethics of work, nature and property and the connections between the nexus of principles behind his treatment of these subjects and his work on mission, vocation and Christian moral principles reveals a system constructed on a foundation of integral ecology. I argue that the presence of this inherent ecological dimension permeating and underpinning Grisez's theological ethics makes his widely overlooked contribution to environmental ethics a valuable resource for the ethical analysis of novel challenges in the Anthropocene era. Prominent critics of Grisez's ethics of nature have—I argue—mischaracterised his position on several important points and too quickly dismissed his new natural law theory as a restatement of a destructive form of Christian anthropocentrism. Applying Grisez's theological ethics to climate change, this thesis argues that two contested principles of climate justice can be endorsed and a third partially challenged on a Grisez School analysis, although political pragmatism may require deficits of justice within the greenhouse gas abatement strategy agreement to be compensated for in other aspects of the treaty to ensure broad participation and an ecologically acceptable outcome. I further argue that Grisez's trust construction of intergenerational justice and his critiques of unsustainable development and unethical investment, together with his assertion of a strict duty to provide food aid to the destitute are deeply relevant to a coherent Christian response to the climate challenge.

Critics of Grisez and Finnis have challenged their interpretation of Aquinas, their solution to the naturalist fallacy and their restatement of the natural law. It has been argued that the theory does not qualify as a species of 'natural law' within the Thomist tradition and questions have been raised as to whether Grisez School ethics is discredited—as a species of enlightenment universalism—or somehow detached from nature in a way that makes it an inappropriate vehicle for environmental ethics. This thesis argues that, notwithstanding these critiques, Grisez's theological ethics provides us with a cogent, accessible and widely influential moral system with great potential for engagement with issues central to the ecological questions of the Anthropocene.

Overall, my argument is that Germain Grisez's theological ethics—once the integral ecology that underpins and colours its theoretical architecture has been recognised—can contribute a valuable ethical framework for the analysis of key issues in environmental ethics, such as climate justice, towards the construction of an authentic Catholic response to our ecological challenges.

Synopsis

The task of Chapter Two is to build my argument for Catholic engagement with ecological issues, especially the climate challenge. This project can only be justified as a vocational commitment if it is possible to show that a reasonable person might conclude that anthropogenic global warming is a real scientific phenomenon, that it poses a challenge of such magnitude and importance as to require societal engagement in the transition to a low-carbon future, and that it constitutes a contemporary issue that cries out for theological reflection: a 'sign of the times' as this concept is employed in Roman Catholic theology. Chapter Two is divided into three subsections. Section One will address the scientific evidence base for anthropogenic climate change. Section Two will then broaden the discussion beyond the technical sphere to look at the depth and scope of the crisis. Section Three will examine the concept of a 'sign of the times' to see whether the climate challenge

is rightly understood as such a sign in principle and whether in practice it is accepted as such by the Roman Catholic Church.

Having established the overall rationale for pursuing a project in Catholic ecotheology, Chapter Three will go on to justify my choice of this particular contribution to the field. Section One will examine whether ecotheology is inherently radical and revisionist in character and Section Two will critique what I shall call 'the dominant narrative': that there has been a progressive 'greening' of Catholic social teaching as the Church reflects on the ecological crisis as a sign of the times and rethinks Catholic doctrine in the light of contemporary challenges. Section Three makes the case for the theologically conservative methodology this thesis adopts.

The aim of Chapter Four is threefold: To develop my argument that Grisez's theological ethics is dependent on an integral ecology, to refute two important critiques of Grisez's work on the ethics of nature and to apply insights gleaned from my study of his ethical system to contested principles of climate justice. Section One will provide an exposition of Grisez's theological ethics in relation to work, nature and property followed by analysis of his thought on mission and vocation as well as the theoretical sub-structure of the new natural law in order to examine the evidence upon which my thesis is based. Section Two aims to present and analyse critiques of Grisez's work on the environment by theologian Michael Northcott and legal scholars Bebhinn Donnelly and Patrick Bishop. Building on the work of the previous section, I aim to show that Grisez's environmentalist critics have been too quick to dismiss his work on animals and the environment as an assertion of Christian anthropocentricism. Section Three begins the constructive work of applying Grisez's environmental ethics to ecological questions. I shall examine three contested principles of climate justice: the concepts of differential burden-sharing and historical emissions responsibility that have been central to the international negotiations since their inception and the notion of fair sharing of the atmospheric commons that underpins contraction and convergence models of greenhouse gas abatement and cap-and-trade emissions trading regimes. In addition I shall explore the implications of the traditional doctrine of the 'universal destination of goods' and especially Grisez's assertion of a strict duty to provide food aid to the destitute, as well as his trust construction of inter-generational justice and critiques of unsustainable development and unethical investment, rounding out my presentation of a Grisez School response to the climate challenge with an analysis of some key principles of climate justice and a short commentary on the new encyclical Laudato Si'.

Chapter Five will present and analyse some theological responses to Grisez's natural law, including critiques advanced by two of his most prominent Thomist critics, Ralph McInerny and Jean Porter. The task of Chapter Five is to establish whether or not Grisez's theological ethics can stand as a philosophically coherent and theologically cogent species of moral realism, despite such critiques. If such a defence of Grisez School ethics can be successfully mounted a case can be made—in the light of my work in Chapter Four on Grisez's environmentalist critics—for taking this research project to the next level in engaging environmental issues from a Grisez School perspective.

My final chapter will provide a recapitulation of the achievements of each of the foregoing chapters, drawing out and synthesising their conclusions so as to answer my initial research question and mapping out the route by which the thesis is established. This will be followed by some proposals for future research and a general conclusion to the project.

Conclusion

As we have seen, this project aims to achieve a recovery of Germain Grisez's environmental ethics, to demonstrate that it is robust to the critiques of prominent environmentalist and theological critics including Grisez's Thomist interlocutors, to argue for a reading of his theological ethics that recognises the integral ecology that is its bedrock and to begin the task of applying Grisez's ethics to ecological questions by abstracting principles applicable to global climate justice. Having introduced the research project, summarised the argument of the thesis and given a chapter-by-chapter breakdown of the enterprise before us, we are now in a position to proceed to the task of establishing the rationale for the project, which will be the subject of Chapter Two.

Chapter 2

Climate Change as a Sign of the Times

The aims of this chapter

In Chapter One I presented a general overview of the thesis; within that framework the task of this chapter is to build my argument for Catholic engagement with ecological issues and especially with the climate challenge. We begin with the research question: 'How might Germain Grisez's natural law and creation theology contribute to the project of articulating a Roman Catholic response to the ecological crisis'? Clearly, then, in order to pose this question at all, I need to establish that such a crisis exists, and that addressing the issue would be an appropriate task for a Catholic moral theologian. Hence this chapter needs to ask whether there exists such a crisis, that (1) meets the criteria for scientific integrity and robustness on the basis of the available evidence and (2) requires a rapid abatement strategy, on the basis of 'state of the art' scientific, economic and political analysis, requiring a broad socio-political engagement in a transition process in which theological ethics has a role to play and (3) meets the criteria the Church sets for discerning whether or not an issue qualifies as 'a sign of the times' and hence constitutes a legitimate topic for Catholic theological and ethical reflection. Finally, to demonstrate the need for the approach adopted in this thesis—which adopts Germain Grisez's conservative Catholic methodology of 'thinking with the Church' and seeks to examine, develop and apply his insights to the climate crisis—I shall need to establish, on the evidence of the relevant texts promulgated by the magisterium, that acceptance of the issue as 'a sign of the times' is an established component of Catholic social teaching, a fact that has been widely overlooked both by environmentalists and by committed Catholics in politically conservative circles.

Section One of this chapter seeks to address the technical question concerning the *reality* of the problem and the need to address it. I shall consider the basic physics of the greenhouse effect—the heat-trapping behaviour of certain atmospheric gases—and the scientific evidence for the existence of a human-enhanced greenhouse effect leading to anthropogenic global warming. I shall consider the likely impacts of this ongoing warming and the temporal and geographical distribution of anticipated harms. It is beyond the scope of this thesis to document and rebut every argument raised in public debate by climate contrarians since that would in itself require more than one thesis.

Section Two argues for a rapid abatement pathway as a reasonable and proportionate response to the climate crisis, essential to avoiding 'dangerous anthropogenic interference with the earth's climate system'.[16] How we respond—as individuals, as Church communities and as Nation States participating in global negotiations—will profoundly affect the wellbeing and security of all our children and grandchildren as well as those vulnerable populations who are already suffering the

[16] Article 2, United Nations Framework Convention on Climate Change (1992). http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf [accessed 16 December 2015].

impacts of climate change.[17] If, as UN Secretary General Ban Ki-Moon has said, the climate crisis is 'the defining challenge of our age',[18] rising to this challenge will require wide public participation, virtuous leadership and steadfast commitment to valuing the unborn and the stranger and to protecting the vulnerable. Hence part one of Section Two analyses the current 'state of the art' evidence as to the scale of the challenge, drawing on the most recent assessment of the science by the International Panel on Climate Change, IPCC AR5. Part two challenges the framing of the crisis as a purely technical problem best dealt with by scientific and economic experts, arguing that a much broader engagement with the issue is necessary to the achievement of tolerable climate outcomes and that the major religions are well placed to play a key role in ethical discussions and consensus building in the public arena.

Section Three attempts to answer the theological question as to whether or not the climate crisis can be classified as a 'sign of the times' as the term is used in Catholic social teaching. This question can be parsed into two: (1) does the scientific and socio-political evidence of our climate crisis, as presented in the previous two sections, meet the established criteria for its classification as a 'sign of the times' *in principle*, and (2) has the magisterium of the Roman Catholic Church *in fact* recognised the climate crisis—and the wider ecological question—as a 'sign of the times'? The first question is crucial to making the case for engagement with the issue of climate change from a Roman Catholic theological perspective. The second, if it can be answered in the affirmative, will be helpful to my argument that a project seeking to recover Grisez's thought on environmental ethics and to emulate his conservative Catholic methodology, applying this to our contemporary ecological challenges, can contribute a valuable new perspective to Anthropocene ecotheology.

Any thesis that aims to contribute to the interdisciplinary collaborative project of constructing a Roman Catholic ecotheological response to the climate crisis depends upon establishing both the scientific claim that we are facing an ecological challenge of crisis proportions and the ethical claim that rising to this challenge requires the commitment of the whole of society, engaging our underlying cultural and religious values, and hence in principle the issue is a *sign of the times* upon which Catholic theologians are called to reflect. Most ecotheologians begin with the premise that the science of global warming is well established and beyond dispute and that the economic case for rapid decarbonisation is similarly robust. Yet it seems to me that ecotheology is inherently an interdisciplinary field and the quest for solutions to the climate challenge will require us to venture across the artificial boundaries of academic disciplines. Conservative Catholics who are deeply committed to following the teachings of the Church appear to have overlooked the clear teaching of the magisterium on this issue. Conservative Catholics often dismiss the climate issue for political reasons: sometimes due to unexamined party loyalty but more often because they have been convinced by 'sceptic' arguments that climate change is a hoax or that sober cost-benefit analysis reveals that a rapid abatement policy would necessitate extravagant expenditure that would harm our fragile economies in ways that we can and should avoid. Arguments that begin with a simple denial of Conservative political beliefs rather than making the case for the opposite conclusion tend to be polarising and counter-productive. Hence my approach in this chapter will be to attempt to

[17] Chris Huhne, 'It won't be long before the victims of climate change make the west pay', *The Guardian*, 29 December 2013. http://www.theguardian.com/commentisfree/2013/dec/29/poorer-countries-climate-change-case [accessed 13 October 2015].

[18] Ban Ki-Moon, 'Climate Change poses "defining challenge" of our time, Ban says', UN News Centre, 7 October 2008. http://www.un.org/apps/news/story.asp?NewsID=28458#.Up8CcIpFBjo [accessed 13 October 2015].

argue the case for the scientific, economic and ethical claims that are implicit in Catholic ecotheology, but hitherto have tended to be assumed rather than articulated.

The particular project of this thesis depends upon a third claim: that there is no necessary connection between engagement with the climate challenge and a radical revisionist approach to theology. As we shall see in Chapter Three, much of ecotheology has been politically and theologically radical. As Section Three of this chapter will show, Catholic social teaching on environmental issues is well developed; yet this point is too often overlooked both by conservative Catholics who do not perceive a tension between their loyalty to the Church and their dismissal of the ecological agenda, and by radical ecotheologians who do not give due credit to the magisterium for existing teaching on ecology and human responsibility. The unfortunate consequence of both positions seems to be that laypeople across the political spectrum remain unaware that creation care is their duty as Catholics and not a supererogatory choice. Hence there is a pressing need for a conservative Catholic analysis of the ecological question. In order to fill this intellectual lacuna—in the hope that more Catholics might consider engaging in social enterprise for the benefit of the environment and in climate justice advocacy as a result—this project seeks to demonstrate that Germain Grisez's work on environmental ethics is capable of extension, in the spirit of 'thinking with the Church' that characterises his conservative Catholic theology, to supply this missing perspective.

In summary: This chapter aims to establish three claims as a necessary foundation for this project: (1) there is a robust scientific case for the existence of human-forced climate change and (2) a reasonable and proportionate response to the scale of the challenge requires wide public participation in the process of transition via a rapid greenhouse gas abatement strategy (3) *in principle*, this crisis merits inclusion on the list of 'signs of the times' and *in fact* the official teaching of the Roman Catholic Church unequivocally accepts it as such. With this foundation in place we will be in a position to proceed, in the following four chapters, to the main task of the project: to establish the thesis that a recovery of Germain Grisez's theological ethics—read in the light of his creation theology—and the deployment of his conservative Catholic theological method in reflection on the climate crisis (an issue he does not address in his published work) can be constructive in producing a novel and significant contribution to Catholic thought on this defining challenge of the Anthropocene era.

Section 1: The scientific evidence for anthropogenic global warming

In this section I shall address the question of the scientific reality of human-caused climate change. I shall argue—on the basis of the fundamental physics of the greenhouse effect and the accumulated evidence of planetary warming and the expected impacts of continuing emissions of known greenhouse gases resulting from human activity—that anthropogenic global warming and related climatic changes are observable and that these undesirable effects are robustly attributable to greenhouse gas pollution caused by human activities. If this case can be made, it will provide the first pillar of the argument of this thesis.

The task of this section is to answer some basic questions about the phenomenon of anthropogenic global warming, in order to describe our context of climate crisis and set the scene for the remainder of the thesis. It is not the task of this thesis to provide a comprehensive overview of climate science; a vast peer-reviewed literature on the subject is periodically reviewed by the International Panel on Climate Change, a quasi-judicial United Nations body that produced its fifth report in 2013. John

Houghton's *Global Warming: The Complete Briefing*[19] provides a helpful summary of the basic science. However, since theological reflection on this issue as a challenge for ethics and public policy requires some grounding in the evidence provided by scientific research as to the origins and projected impacts of global warming, it will be helpful to include a brief discussion of the scientific evidence base before moving on in Section Two to the most recent conclusions of the IPCC on issues relevant to public policy. So by way of background, we need to address some basic questions, such as: 'what is the evidence for global warming?'; 'what is the greenhouse effect?'; 'how do we know human activities are causing an enhanced greenhouse effect?' and 'is global warming necessarily a bad thing?' My central aim here is to establish the connection between greenhouse gas emissions and global warming as a matter of observation combined with fundamental theoretical physics.

The evidence for the phenomenon of global warming

The evidence that the Earth's climate is changing comes from multiple independently produced datasets comprising observations made by different groups of scientists in different parts of the world including direct measurements as well as remote sensing from satellites and other platforms.[20] We have reliable instrumental data accumulated over the past century in addition to paleoclimate reconstructions that extend the record back over millions of years.[21] The surface temperature records, taken together with measurements of other climate changes, provide a comprehensive view of our changing climate.[22] The atmosphere has warmed and atmospheric concentrations of CO_2 have increased.[23] Sea-level has risen as the oceans have warmed, volumes of snow and ice have diminished and ocean acidity has increased;[24] glaciers are retreating at unprecedented rates.[25] The overall evidence for anthropogenic global warming reviewed by the IPCC is, in their professional

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[19] John Houghton, *Global Warming: The Complete Briefing* (Cambridge: Cambridge University Press, Fourth Edition, 2009).

[20] 'The three most highly cited combined land temperature and SST data sets are NOAA's MLOST, NASA's GISTEMP, and the UK's HadCRUT. A new merged land-ocean temperature data set is available from the Berkeley Earth group. The University of Delaware and berkeleyearth.org produce global land-only surface temperature data sets. HadCRUT also has a land-only version, CRUTEM.' National Center for Atmospheric Research Staff (Eds). Last modified 25 Mar 2014. The Climate Data Guide: Global Temperature Data Sets: Overview & Comparison Table. https://climatedataguide.ucar.edu/climate-data/global-temperature-data-sets-overview-comparison-table#sthash.gUde0hTb.dpuf [accessed 13 October 2015].

[21] National Oceanic and Atmospheric Administration, National Centers for Environmental Information, Climate Reconstruction https://www.ncdc.noaa.gov/data-access/paleoclimatology-data/datasets/climate-reconstruction [accessed 13 October 2015].

[22] A summary table of key changes over the twentieth century is given in John Houghton, *Global Warming: The Complete Briefing*, pp. 76–77.

[23] R. B. Bacastow, C. D. Keeling, and T. P. Whorf, 'Seasonal Amplitude Increase in Atmospheric Concentration at Mauna Loa, Hawaii, 1959-1982', *Journal of Geophysical Research*, 90: D6, pp. 10529–10540, October 20, 1985 http://instructional1.calstatela.edu/tsalmas/Biol%20420/Readings/Bacastow%201985.pdf [accessed 13 October 2015].

[24] Renate Schubert *et al.,* 'The Future Oceans—Warming Up, Rising High, Turning Sour.' WGBU (German Advisory Council on Global Change) Special Report 2006. http://cmbc.ucsd.edu/Research/Climate_Change/Future%20Oceans.pdf [accessed 13 October 2015].

[25] Tim Radford, 'Speed of glacier retreat worldwide "historically unprecedented" says report' *The Guardian* 4 August 2015 http://www.theguardian.com/environment/2015/aug/04/speed-glacier-retreat-worldwide-historically-unprecedented-climate-change [accessed 13 October 2015]; citing Michael Zemp et al., 'Historically unprecedented glacier decline in the early 21st Century', *Journal of Glaciology* 61.228 (2015).

opinion, unequivocal,[26] and many of the observed changes in the instrumental record can be shown to be unprecedented over decades to millennia, when compared to paleoclimatic reconstructions.[27]

The basic physics

The fundamental physics behind the 'greenhouse effect' is well-known and uncontroversial; it was first recognised by the famous French mathematician Jean-Baptiste Joseph Fourier, who tried—in 1827—to calculate how warm the Earth ought to be, based on its distance from the sun.[28] Discovering that our planet is considerably warmer than such calculations would predict, Fourier postulated that the atmosphere might account for this discrepancy and even speculated that carbon dioxide might be the culprit.[29] However it was not until 1860 that Irish scientist John Tyndall was able positively to identify the greenhouse gases responsible for the warming effect by measuring the absorption spectra of different gases in his laboratory. Tyndall—a flamboyant character and a gifted communicator of science—saw only the benefits of this natural greenhouse effect and waxed lyrical in describing the dire consequences were the planet to be robbed of its benign influence: 'the warmth of our fields and gardens would pour itself unrequited into space, and the sun would rise upon an island held fast in the iron grip of frost.'[30]

In 1896, Svante Arrhenius—a Swedish chemist and Nobel Laureate—was the first to calculate the effect of adding further carbon dioxide to the atmosphere: He estimated that doubling the concentration of CO_2 would increase the average surface temperature by five to six degrees Celsius—a value not too far from our present scientific understanding.[31] However Arrhenius hugely underestimated the scale and pace of industrial development and thought it would take thousands of years to produce a measurable effect on the planet. It was British engineer Guy Stewart Callendar, in 1940, who first calculated the warming that theoretical physics could *already* attribute to human consumption of fossil fuels, but it was not until 1957 that the extent to which industrialisation represented a large-scale geophysical experiment—and one that potentially might have undesirable

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[26] Sophie Yeo, 'IPCC climate report: evidence humans warming planet "unequivocal"', *Climate Change News* 14 January 2015. http://www.climatechangenews.com/2014/11/02/ipcc-climate-report-conclusive-evidence-humans-warming-planet/ [accessed 13 October 2015].

[27] Fiona Harvey, 'IPCC climate report: Human impact is "unequivocal"', *The Guardian*, 27 September 2013. http://www.theguardian.com/environment/2013/sep/27/ipcc-climate-report-un-secretary-general [accessed 13 October 2015]; citing IPCC, 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F. *et al*. (eds.)]. (Cambridge, UK and New York: Cambridge University Press). https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WGIAR5_SPM_brochure_en.pdf [accessed 13 October 2015], p 2.

[28] An accessible discussion of Fourier's work can be found in Andrew Dessler and Edward A. Parson, *The Science and Politics of Global Climate Change: A Guide to the debate* (Cambridge: Cambridge University Press, second edition 2010) pp.10–12.

[29] John Houghton, *Global Warming: The Complete Briefing*, p. 23.

[30] John Tyndall; quoted in: Gabrielle Walker and Sir David King, *The Hot Topic: How to tackle global warming and still keep the lights on* (London: Bloomsbury, 2008) p. 16.

[31] The Equilibrium Climate Sensitivity is defined as the change in global mean temperature that results when the climate system, or a climate model, attains a new equilibrium resulting from a doubling of the atmospheric CO_2 concentration. Dana Nuccitelli, 'What you need to know about climate sensitivity' The Guardian, 10 May 2013. http://www.theguardian.com/environment/climate-consensus-97-per-cent/2013/may/10/climate-change-warming-sensitivity [accessed 13 October, 2015]; citing Rohling, E. J. *et al*., 'Making sense of paleoclimate sensitivity' *Nature* 491, 29 November 2012, pp. 683–691.

consequences—was raised by Roger Revelle and Hans Suess of the Scripps Institute of Oceanography in California. Revelle recruited Charles David Keeling who began to keep a record of atmospheric carbon dioxide concentrations, making regular measurements from his observatory on Mauna Lao in Hawaii,[32] a site chosen for its remoteness from industrial sources that might otherwise bias his results.

The famous saw-toothed 'Keeling curve' charts the inexorable rise in CO_2 concentrations in the atmosphere.[33] In the light of this we would expect to see rapid global warming over the same time-period and indeed the global temperature record confirms this expectation, providing robust and statistically significant evidence of multi-decadal warming. Taken together with multiple sets of proxy data that allow paleoclimatologists to estimate historical climatic conditions, the temperature record indicates an unprecedented rate of warming since the advent of industrialisation.[34] As Burton Richter says, 'Nothing in the past 1200 years is like the sharp spike in temperature that began in the nineteenth century coinciding with the increase in the use of fossil fuels. Natural processes do not normally change the global average temperature this fast. The most likely cause is human activity.'[35]

Computer simulations can combine the calculated contribution of anthropogenic greenhouse gas emissions with known natural climate drivers like solar activity, ocean oscillations and volcanic eruptions.[36] Whilst any model, by definition, over-simplifies the complexities of the earth's climatic system, and no one has built a sufficiently sophisticated model to predict exactly how temperatures will change over short time-periods—over which natural climate drivers dominate the observed changes—climate modelling studies have been very successful in predicting the long-term warming trend and correlating this with theoretical calculations of the warming expected on the basis of known human contributions to the stocks of greenhouse gases in the atmosphere. As Sir David King former chief scientific advisor to the Blair government put it:

> There is no way to explain the warming of the past few decades unless you include the rise in greenhouse gases, but when you do put the gases in you see exactly what happened in the real world […] The recent heating up of planet Earth has carbon dioxide's fingerprints all over it […] Human activity is to blame for the rise in temperature over recent decades, and will be responsible for more changes in the future. There are plenty of areas for debate in the global warming story but this is not one of them.[37]

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[32] 'The Keeling Curve' demonstrates a steady rise in atmospheric CO_2 concentrations. Because there is more land in the Northern Hemisphere than in the Southern, the curve has an annual cycle, with levels dropping slightly during the Northern summer: see Walker and King, *The Hot Topic*, p. 22 and p. 278, n. 21, which should read 'and each Northern winter levels *rise* again as the plants slow down or die off.'

[33] Scripps CO_2 Program, Scripps Institute of Oceanography, Keeling Curve Lessons. http://scrippsco2.ucsd.edu/program_history/keeling_curve_lessons.html [accessed 13 October 2015].

[34] US National Research Council, *Surface Temperature Reconstructions for the last 2000 years* (Washington DC: National Academy Press, 2006) http://www.nap.edu/catalog.php?record_id=11676 [accessed 13 October 2015].

[35] Burton Richter, *Beyond Smoke and Mirrors: Climate Change and Energy in the 21st Century* (Cambridge: Cambridge University Press, 2010), p. 33.

[36] Grant Foster and Stefan Rahmstorf, 'Global temperature evolution 1979–2010', *Environmental Research Letters* 6 (6 December 2011), pp. 1–8. http://iopscience.iop.org/1748-9326/6/4/044022 [accessed 13 October 2015].

[37] Walker and King, *The Hot Topic*, pp. 31, 36, 37.

Climate sceptic and Chemistry graduate Peter Forster, Bishop of Chester, in his introduction to a paper for the Global Warming Policy Foundation, of which he is a trustee, concedes: 'It should be acknowledged, of course, that the case for increasing carbon dioxide concentrations having a forcing effect upon global temperatures is very strong.'[38]

Robert Henson points out that, if some previously unknown factor were to be discovered that could account for the observed global warming without factoring in human activities, it would beg a rather difficult question: why are carbon dioxide and other greenhouse gases *not* producing the warming effect that fundamental physics predicts they should?[39] As Eric Posner and David Weisbach comment: 'By analogy, if we find the butler standing in front of the victim with a smoking gun, it is possible that someone else is the criminal, but we would have to be able to find that someone else and explain the gun and the smoke. This is a tall order.'[40]

Impacts of climate change

As Tyndall famously observed, there are advantages as well as disadvantages to global warming; without the natural heat-trapping properties of greenhouse gases our planet would be a great deal colder and less hospitable. As Bjørn Lomborg correctly notes, in some European countries where winter deaths due to cold greatly exceed summer deaths from heat stress, the net impact of moderate global warming would be expected to be fewer temperature-related deaths.[41] However, there are two obvious problems with his argument.[42] Firstly there is the geographical distribution of advantages and disadvantages of human fossil-fuel use—from the African point of view the prospect of fewer cold-related deaths in wealthy industrialised countries may not seem adequate compensation for increased numbers of African heat-related deaths, especially in view of the huge disparity between Europe and Africa in terms of their historical emissions responsibility. Secondly Lomborg's central thesis—that greenhouse gas abatement measures are too expensive and estimates of impacts are alarmist—appears to be built on the assumption that temperature increases can be limited to 2.6°C without any abatement action being taken. There is no basis for this assumption.[43]

Without a serious global abatement strategy, emissions and stocks of greenhouse gases in the atmosphere—and hence the temperature of the planet—will continue to rise. Furthermore, delaying the implementation of abatement measures will necessitate a steeper decline thereafter to achieve the same climate outcome. But transitioning our complex global economy and modern forms of agriculture cannot be achieved overnight; in principle it must take a finite amount of time to shut down fossil-fuel dependent activities and switch to sustainable energy sources. Let us assume that

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[38] Peter Lee, *Ethics and Climate Change Policy* (with a foreword by Dr Peter Forster, Bishop of Chester), *The Global Warming Policy Foundation* Essay 2, 16 December 2014, p. iv. http://www.thegwpf.org/content/uploads/2014/12/Lee-Ethics-climate-change.pdf [accessed 13 October2015]

[39] Robert Henson, *The Rough Guide to Climate Change* (London: Penguin Books, 2006), p. 10.

[40] Eric A. Posner & David Weisbach, *Climate Change Justice*, (Princeton, New Jersey: Princeton University Press, 2010), p. 16.

[41] Bjørn Lomborg, *Cool It: The Skeptical Environmentalist's Guide to Global Warming* (London: Marshall Cavendish, 2007), p. 18.

[42] A more philosophical problem that Catholic theologians might like to add is that the idea that advantages to some and disadvantages to others can be aggregated in this way makes utilitarian assumptions that are incompatible with the concept of the dignity of every person as *imago Dei*.

[43] Lomborg, *Cool It*, p. 13.

future governments can be relied upon to muster the political resolve—although current governments evidently cannot—to prioritise the transition project at some future point, after our inaction has ratcheted up the level of the challenge. In addition to the issue of unfairly burdening the next generation with our pollution problems, there is a technical issue concerning the achievable transition rate. At some point, theoretically, the rate of emissions reduction required to remain within the available carbon budget could cross a threshold at which the slope of the required abatement curve is steeper than the rate of transition that is technically feasible. Clearly we ought to take steps to avoid this outcome. In order to do so we need to know how much more of the heat-trapping gases we can add to the atmosphere before the level of warming that we all agree it would be desirable to avoid will already be in the pipeline and hence inevitable.

Assuming, for the sake of argument, that the impacts of climate change on our own species is the only morally relevant question: we need to ask 'what level of additional warming due to human activities would be reasonably benign, or—put differently—at what level would increasing stocks of atmospheric greenhouse gases pose a threat to human interests comparable to the costs of abatement action?' A scientific conference held in Exeter in 2005[44] at the invitation of the then prime minister Tony Blair, is generally credited with defining a 2^{o}C rise in global average temperature as the threshold above which impacts are likely to be 'dangerous' and hence the level below which signatories are legally required to keep temperature rise to comply with article 2 of the UNFCCC.[45] This became the generally accepted guardrail for global temperature rise at the Copenhagen climate conference COP 15 in 2009, with signatories to the Copenhagen Accord expressing the shared ambition to limit anthropogenic global warming to 2^{o}C. [46]

Many leading participants in the international negotiations do not now believe this is a politically achievable goal.[47] Others have questioned whether or not it is practically achievable even given the political will to take the necessary action; Peter Newell and Matthew Paterson, writing in 2010, commented that 'unless you make the most optimistic assumptions about the sensitivity of the climate to CO_2 changes this threshold is basically already passed.'[48] On the basis of improved

[44] DEFRA, Avoiding Dangerous Climate Change: Scientific Symposium on Stabilisation of Greenhouse Gases 1–3 February 2005, Met Office, Exeter, United Kingdom.
http://www.mtnforum.org/sites/default/files/publication/files/1901.pdf [accessed 13 October 2015]

[45] 'The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.' Article 2 United Nations Framework Convention on Climate Change, 1992.

[46] 'We agree that deep cuts in global emissions are required according to science, and as documented by the IPCC Fourth Assessment Report with a view to reduce global emissions so as to hold the increase in global temperature below 2 degrees Celsius, and take action to meet this objective consistent with science and on the basis of equity.' Copenhagen Accord, 18 December 2009
http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf [accessed 13 October 2015].

[47] Damian Carrington, 'Paris summit pledges won't avoid dangerous warming—UK and UN' *The Guardian* 16 September 2015, http://www.theguardian.com/environment/2015/sep/16/paris-climate-summit-pledges-wont-avoid-dangerous-warming-say-uk-and-un [accessed 13 October 2015]

[48] Peter Newell and Matthew Paterson, *Climate Capitalism: Global Warming and the Transformation of the Global Economy* (New York: Cambridge University Press, 2010), p. 5.

understanding of climate sensitivity and the carbon budget approach in the most recent IPCC report, as we shall see, we may have reason to be a little more optimistic on this point than Newell and Paterson. However their assessment that 'if you make less optimistic assumptions about climate sensitivity and demanding but plausible emissions scenarios then it is hard to avoid the conclusion that we are likely to be headed for more like 4°C or even more' is consistent with current understanding of climate science.[49]

Unfortunately—as the scientists at the Exeter conference quite clearly indicated—it is also extremely misleading to suggest that warming below this threshold would be universally benign: significant harmful ecological consequences are to be expected even for a 1°C rise in global average surface temperature, and dangerous impacts on the most vulnerable populations in Africa, Asia and a number of small island states are already happening and more are inevitable on the basis of historic emissions, the full effect of which is yet to be felt.[50]

There is a vast literature on the expected impacts of global warming. Economic cost-benefit analyses, as Posner and Weisbach point out, are extremely speculative and likely to underestimate the full costs of impacts—for example those on ecosystem services[51] security and displacement of vulnerable populations[52]—that are not easily reduced to market values. The Center for International Earth Science Information Network (CIESIN) at Columbia University produced a set of graphic representations of impacts by country, estimating climate change vulnerabilities on the basis of pre-existing indices of susceptibility to environmental stresses. They found that of the fifteen most vulnerable states, fourteen were in Africa, with Bangladesh the only non-African country on that list.[53] A study by William Nordhaus and Joseph Boyer[54] gives a slightly different estimate of the geographical spread of exposure to climate change, with China appearing less vulnerable than in the Columbia University study. Both studies agree however that Africa and Asia suffer the most extreme

[49] Newell and Paterson, *Climate Capitalism,* p. *5.*

[50] 'All the evidence suggests that the world will experience significant and potentially highly dangerous changes in climate over the next few decades no matter what we do now. That's because the ocean has a built-in lag. It takes time to heat up, which is why the nicest time to swim is often the end of summer rather than the middle. The same principle holds for global warming, but on a longer timescale: because the oceans gradually soak up heat generated by the extra greenhouse gases, the full extent won't be felt for decades to centuries.' Walker and King, *The Hot Topic*, p. 53.

[51] 'There is a substantial field of research that attempts to put a value on environmental services—the often unseen benefit the environment provides. This research is not yet widely incorporated into climate change cost-benefit analysis and it needs to be' Posner and Weisbach, *Climate Change Justice*, p. 57; see also n. 19.

[52] 'Full cost-benefit analyses of climate change thus far have been limited in large part because of the complexity of the problem; the best analyses have been able to do is estimate market impacts of climate change and make best guesses about the cost of reducing emissions. They do not know what it will cost to reduce emissions, and examining only market impacts leaves out many of the most important impacts, such as those on migration and national security.' Posner and Weisbach, *Climate Change Justice*, p. 20.

[53] Posner and Weisbach, *Climate Change Justice*, pp. 22–25; quoting Gary Yohe, Elizabeth Malone, Antoinette Brenkert, Michael Schlesinger, Henk Meij, Xiaoshi Xing and Daniel Lee, 'A synthetic assessment of the global distribution of vulnerability to climate change from the IPCC perspective that reflects exposure and adaptive capacity' (Palisades, New York: CIESIN [Center for International Earth Science Information Network] Columbia University, 2006) http://ciesin.columbia.edu/data/climate/ [accessed 14 October 2015]

[54] William D. Nordhaus and Joseph Boyer, *Warming the World: economic models of global warming* (Massachusetts: MIT Press, 2000).

vulnerability. On Nordhaus and Boyer's account, most regions of the world suffer a net loss of GDP for warming over 2.5°C, with Russia the only net beneficiary at this level of warming.[55]

To sum up: a reliable evidence base of instrumental data attests to the fact of global warming alongside atmospheric increase in carbon dioxide levels. The greenhouse effect, whereby atmospheric gases absorb and trap some of the heat energy from the sun is well established and uncontroversial. We know that human activities including fossil fuel consumption, agriculture and cement production are adding carbon dioxide and other greenhouse gases to the atmosphere and we can estimate the expected anthropogenic warming effect from the known quantities of these gases generated in human activities and their measured absorption spectra. Although the sensitivity of the climate to increased stocks of greenhouse gases is not yet determined with precision, we can estimate the probable range of temperature increase associated with a given 'carbon budget'. This is the anthropogenic enhanced greenhouse effect: the extent to which global temperatures are increased due to human activities. It remains for my next two sections to attempt to answer some questions that go beyond the purely scientific evidence for the phenomenon of anthropogenic global warming. The final section of this chapter will consider the case for a theological engagement with the climate crisis. However before we move on to the enterprise of Catholic ecotheology of which this thesis is a subsidiary project, we need to question the characterisation of the issue as a 'crisis': perhaps there is a technical solution that can be implemented without a pressing need to engage non-specialists in public debate concerning greenhouse gas abatement policy? The proper characterisation of climate change including its immediacy and the scope of the expected ramifications of climate inaction for the security and prosperity of ordinary citizens is the topic of my next section.

Section 2: The case for rapid decarbonisation and religious engagement

Having made the scientific case for the existence of the phenomenon of anthropogenic global warming in Section One, the aim of this section is to establish that the nature and seriousness of the ecological crisis are such that there is a need for a paradigm shift in the way the public debate is currently framed, to allow a much wider participation in and commitment to the process of decarbonising the global economy. The assertion that the climate challenge is in principle a moral concern that requires the engagement of our deepest cultural heritage of philosophical and religious values constitutes the second pillar of my argument for the approach adopted in this research project.

The task of this section is to address the question of whether this challenge is a technical problem best left to those with the relevant expertise to solve, or a crisis of such magnitude that it will require much broader societal participation to negotiate safe passage to a sustainable future. Part one of this section draws on the fifth report of the International Panel on Climate Change, IPCC AR5—newly published at the time of writing—in order to give a snapshot of the current scientific advice being given to policymakers. Part two leaves behind the technical framing of the issue and ventures into the thickets of climate politics, ethics and economics in order to gauge the scope and complexity of the challenge ahead, and to make the case for a rapid transition of our energy systems.

[55] Posner and Weisbach, *Climate Change Justice*, p. 25.

As a chemistry graduate in the nineteen eighties, I recall trying to reassure a child who was worried about the hole in the ozone layer; I pointed out that there were lots of clever scientists and policymakers working on this and good prospects for an international agreement that would ban the chemicals responsible for stratospheric ozone depletion. I remember thinking then that the issue of climate change, which was just beginning to dawn on public consciousness, is inherently a much more difficult problem to resolve. A treaty that would create the framework within which a solution can be implemented requires unprecedented international cooperation and the economic ramifications of the necessary changes are vastly bigger that those involved in halting the emission of gases that damage the ozone layer, since almost the entire global economy depends on fossil-fuel consumption.

For many years the climate justice movement has worked to raise awareness of the climate crisis as an issue affecting the most vulnerable of the global poor, seeking to engage Christians and others in advocating on behalf of today's climate victims for stringent abatement policies and the commitment of resources to ease their plight—as a matter of compensatory justice as well as basic humanity and compassion. Most environmental activists would agree that the climate justice movement has comprehensively failed to provoke a public response in industrialised societies that is proportionate to the scale of the global challenge or the extent of the suffering and human rights violation entailed by the delays and persistent deadlock that have characterised the ongoing international negotiations. Indeed it is possible that the focus of climate justice advocacy on the plight of the poor in developing countries has, in some contexts, even added to the prevailing complacency with respect to potential climate impacts closer to home, especially the threat of rising sea-levels on vulnerable populations inhabiting coastal cities in comparatively wealthy industrialised countries like the United States.

In order to argue that a much wider and more substantial public involvement in mitigation and transition is reasonably required, I shall need to adduce evidence that such a response in proportionate to the challenge. In addition to grasping the dimensions of the challenge on the basis of the available scientific evidence—the subject of part one of this section—we shall need to consider—in part two—the history and ethics of climate change as a challenge for public policymakers, the construction of the concept of climate justice, the geographical distribution of vulnerability to and historical culpability for the negative impacts of the phenomenon and issues concerning development rights, proposed loss and damage mechanisms and intergenerational equity.

Part 1: What is new in IPCC AR5?

The International Panel on Climate Change published a draft report of the results of their fifth review of the scientific basis of climate change (IPCC AR5, working group 1) in September 2013. The report states that the warming of the climate system since 1850 is unequivocal and unprecedented over decades to millennia. Overall, combined land and ocean surface temperatures show warming of about 0.85^{o}C over the period between 1880—2012. Having reviewed the available evidence, the authors conclude that it is *extremely likely*[56] that more than half of the observed increase in global

[56] This term is used by the IPCC to indicate a 95–100% certainty level, see: Cubasch, Ulrich, Donald Wuebbles, Deliang Chen, Maria Cristina Facchini, David Frame, Natalie Mahowald, and Jan-Gunner Winther, 2013: 'Introduction'. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Stocker, Thomas F., Dahe Qin, Gian-Kasper Plattner, Melinda B. Tignor, Simon K. Allen, Judith Boschung, Alexander Nauels, Yu Xia, Vincent Bex and

average surface temperature from 1951 to 2010 was caused by human activities; the best estimate of the human contribution to warming over this period is similar to the level of warming actually observed.[57] The long-term climate model simulations give an estimation of the underlying trend that agrees with observations over the same period. The main differences between the scientific understanding in the new report compared to the fourth report published in 2007 are in the estimation of the magnitude of expected sea-level rises, the range given for the Equilibrium Climate Sensitivity (ECS), the estimates of the radiative forcing or warming potentials of different gases—which now include feedback effects that are better understood—and the adoption of the climate budget approach to understanding the scale of the global challenge and apportioning abatement responsibility.

Expected sea level rises

The estimation of likely sea-level rises by the end of the twenty-first century are considerably higher than those given in IPCC AR4 (26 to 82cms compared to 18 to 59cms) although the figures are not directly comparable as they are derived from different scenarios. The fifth report adopts a series of four new representative concentration pathways (RCPs) based on different mitigation policy scenarios. Under all the RCPs—which cover outcomes from stringent abatement (RCP 2.6) to very high emissions which do not peak before the end of the century (RCP 8.5)[58]—the rate of sea-level rise by 2100 is very likely to exceed the observed rate between 1971 and 2010 due to increased ocean warming and increased loss of mass from glaciers and ice-sheets.[59] Confidence in projections of global mean sea level rise has increased since the fourth report because of improved physical understanding of the components of sea-level, the improved agreement of process-based models with observations and the inclusion of ice-sheet dynamical changes.[60]

At the time of writing, the IPCC have not yet published their revised estimates of impacts and vulnerabilities—the task of Working Group II. However, on the basis of the increases to projected sea-level rises, it seems reasonable to expect that estimates of the number of people exposed to risks of flooding and storm damage will increase dramatically, as will the projected costs of sea-defences and other adaptation measures. We should also expect to see changes in the map of climate vulnerability, with countries like Bangladesh and Mozambique and cities on the Eastern seaboard of the United States, amongst others, seeing increased exposure.

Pauline M. Midgley (eds.). (Cambridge, UK and New York, USA: Cambridge University Press), p.121, n. 2. http://www.climatechange2013.org/images/report/WG1AR5_Chapter01_FINAL.pdf [accessed 14 October 2015].

[57] Thomas F. Stocker, Dahe Qin, Gian-Kasper Plattner, Melinda B. Tignor, Simon K. Allen, Judith Boschung, Alexander Nauels, Yu Xia, Vincent Bex and Pauline M. Midgley (eds.). *IPCC Climate Change 2013: The Physical Science Basis: Working Group I Contribution to the fifth assessment report of the International Panel on Climate Change, Summary for Policymakers*. (Cambridge, UK and New York, USA: Cambridge University Press), p.15 https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WGIAR5_SPM_brochure_en.pdf [accessed 15 October 2015].

[58] David Hone points out that even meeting the abatement requirements of RCP 8.5 (4^{o}C) would necessitate a doubling of current rates of decarbonisation. David Hone, 'Is there cause for optimism on emissions? 8 November 2013. http://blogs.shell.com/climatechange/ [accessed 12 Nov 2013].

[59] Stocker et al. *Summary for Policymakers*, p. 23.

[60] Stocker et al. *Summary for Policymakers*, p. 23.

Equilibrium Climate Sensitivity

The 'likely' range of the equilibrium climate sensitivity in AR5 is given as 1.5°C to 4.5°C. According to Venkatachalam Ramaswarmy, director of the NOAA's Geophysical Fluid Dynamics Laboratory and one of the report's co-authors, this represents a slight increase in uncertainty rather than a new concrete target for warming. The range is the same as that given in the first three IPCC reports; in the fourth assessment it narrowed to 2 to 4.5°C and now it has reverted to previous estimates.[61] Oddly, however, the fifth report does not quote a 'best estimate' figure for the climate sensitivity as previous reports have done.

Radiative forcing of different greenhouse gases

The warming potential of different atmospheric pollutants is given by its RF value (radiative forcing). In the most recent report, feedback effects which are now better understood have been included to give a better indication of the temperature response due to the gaseous drivers of climate change. The effective radiative forcing of methane (CH_4) is much larger[62] than the concentration-based estimate used in AR4, which excluded changes in the concentration of ozone and stratospheric water vapour caused by additional methane in the atmosphere and the feedback effects of other emissions on methane concentrations. This new insight into the effect of methane on the climate is of interest because it is crucial to the calculation of the carbon footprint of agriculture and food consumption, especially rice and meat production, and to the calculation of the relative merits of natural gas as a less polluting alternative to coal and oil and hence as a possible bridging-fuel to a low-carbon economy. Estimates of fugitive methane emissions during unconventional gas production vary enormously, with some estimates high enough to give a footprint comparable to that of coal.[63] Clearly such calculations depend crucially on the estimated warming potential of methane and will need to be revised on the basis of the improved scientific understanding of the impact of methane on the atmosphere as reported in the latest IPCC report.

The hiatus in surface temperature measurements

Whilst it is clear from measurements of ice-volume depletion, sea-level rise, glacial retreat and other datasets that the earth is continuing to warm, much has been made of a recent hiatus period in the surface temperature record over the past decade or 15 years depending on whether you look at the NASA GISS or the HadCRUT4 data compilation. There is some ongoing dispute within the climate modelling community with one school of thought attributing the current surface temperature hiatus to reduced radiative forcing caused by increased stratospheric water-vapour,[64] the rapid increase in

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[61] Nathanael Massey, 'IPCC Revises Climate Sensitivity', *Scientific American*, 27 September 2013 http://www.scientificamerican.com/article.cfm?id=ipcc-revises-climate-sensitivity [accessed 15 October 2015].

[62] Stocker et al. *Summary for Policymakers*, p. 11.

[63] Robert W. Howarth, Renee Santoro & Anthony Ingraffea, 'Methane and the Greenhouse Gas Footprint of Natural Gas from Shale Formations', *Climatic Change*, 13 March 2011. http://www.acsf.cornell.edu/Assets/ACSF/docs/attachments/Howarth-EtAl-2011.pdf [accessed 15 October 2015]. Cf. Trevor Stephenson, Jose Eduardo Valle and Xavier Riere-Palou, 'Modeling the Relative GHG Emissions of Conventional and Shale Gas Production', *Environmental Science and Technology* (15 December 2011) 45(24) 10757–10764. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3238415/ [accessed 15 October 2015].

[64] Susan Solomon, Karen H. Rosenlof, Robert W. Portmann, John S. Daniel, Sean M. Davis, Todd J. Sanford and Gian-Kasper Plattner, 'Contributions of stratospheric water vapour to decadal changes in the rate of global warming' *Science*, 327, pp. 1219–1223 (2010). http://www.sciencemag.org/content/327/5970/1219.abstract [accessed 15 October 2015].

stratospheric and tropospheric aerosols[65] and the 2009 solar minimum,[66] whilst another school considers the hiatus to be part of natural variability, especially influenced by a La-Nina-like cooling in the tropical Pacific,[67] and a third group postulates that the geographical distribution of sampling stations underestimates the warming trend—a bias that can be corrected with statistical interpolation methods.[68] The research in this area is very recent, with some of the key papers published after the cut-off point for inclusion in the IPCC's 5th review of the science of global warming. The IPCC were put under pressure to address the issue in their report because it had become the focus of claims that global warming had 'reached a plateau' or had 'paused' made in the run-up to publication of the report by prominent climate sceptics. In the end, the agreed wording of the summary for policymakers included two paragraphs on the hiatus—here is the first:

> In addition to robust multi-decadal warming, global mean surface temperature exhibits substantial decadal and inter-annual variability. Due to natural variability, trends based on short records are very sensitive to the beginning and end dates and do not reflect the long-term trends. As one example, the rate of warming over the past 15 years (1998—2012; 0.05 [-0.05 to +0.15]^{o}C per decade) which begins with a strong El Niño is smaller than the rate calculated since 1951 (1951—2012; 0.12 [0.08 to 0.14]^{o}C per decade). Trends for 15-year periods starting in 1995, 1996 and 1997 are 0.13 [0.02 to 0.24], 0.14 [0.03 to 0.24], 0.07 [-0.02 to 0.18]^{o}C per decade, respectively.

This was not helpful in bringing clarity to the public debate following the publication of IPCC AR5. Essentially they are making two points in relation to the claim that there has been no global warming over the past fifteen years. Firstly, in order to get a meaningful value for the underlying trend you need to look at a wider time-window. This is because there are natural cycles and forcing events superimposed on the anthropogenic upward slope, which dominate the picture over time-intervals comparable to the periodicity of the natural cycles. Secondly, 1998—the start date for the 15 year period focused on by climate sceptics—was an unusually warm year as a result of a strong El Niño effect. To get an accurate picture of the underlying human-forced temperature trend one would need to subtract the influence of natural factors—including solar cycles and volcanic eruptions as well as ocean oscillations such as ENSO—from the raw data. The values given for 15 year trends with different start dates is given to illustrate the point that you can't get a meaningful figure for the underlying gradient of the greenhouse gas-driven component of warming unless you look at a longer time-period.

It is inaccurate to claim that anthropogenic global warming has reached a 'plateau' since there is no scientific reason to expect the hiatus to be permanent or to deny the reality of an underlying upward

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[65] S. Solomon, J. S. Daniel, R.R. Neeley III, J. P. Vernier, E. G. Dutton and L. W. Thomason, 'The persistently variable "background" stratospheric aerosol layer and global climate change', *Science* 333 (2011), pp. 866–870; Robert K. Kaufman, Heikki Kaupp, Michael L Mann and James H. Stock, 'Reconciling anthropogenic climate change with observed temperature 1998–2008', *Proceedings of the National Academy of Sciences of the United States of America* 108 (2011), pp. 11790–11793. http://www.pnas.org/content/108/29/11790.abstract [accessed 15 October 2015].

[66] Kaufman et al. 'Reconciling anthropogenic climate change'.

[67] Yu Kosaka and Shang-Ping Xie, Recent global-warming hiatus tied to equatorial Pacific surface cooling *Nature Letters* 501 (2013), pp. 403–407. http://www.nature.com/nature/journal/v501/n7467/full/nature12534.html [accessed 15 October 2015].

[68] Kevin Cowtan and Robert Way, 'Coverage bias in the HadCRUT4 temperature series and its impact on recent temperature trends', *Quarterly Journal of the Royal Meteorological Society* 140.683 (July 2014), pp. 1935–1944, Part B. http://onlinelibrary.wiley.com/doi/10.1002/qj.2297/abstract [accessed 15 October 2015].

trend. It is to be expected that the superimposing of competing factors will occasionally give rise to hiatus periods in the raw data, even if the estimated gradient of the underlying anthropogenic contribution to the temperature remains unchanged. It is easy to see why this might be the case if one thinks of a given fifteen year period as a see-saw pivoting on the central year. There are known natural variations that can tilt the see-saw in either direction, and occasionally for a given period it is possible that natural effects might exert a net upward force on the earlier data and a net downward force on the later measurements, causing the see-saw to appear level. Any parent who has played with children on a see-saw will grasp at once that by leaning on the end on which the lighter child is seated or lifting the end with the heavier child one can force the see-saw to a level position against its natural tendency to elevate the lighter child. One would not conclude from this observation that the normal laws of physics had been suspended. Similarly, it is inaccurate to speak of a 'pause' in global warming, although some climate scientists have used this unhelpful terminology,[69] since the layperson associates the word 'pause' with everyday experiences such as the operation of the 'pause-button' on the television remote-control, and hence naturally but quite wrongly understands this to mean that climate change has temporarily stopped, concluding—understandably—that business as usual can be sustained without the adverse consequences predicted by environmental alarmists. In reality there is good reason to expect an abrupt end to the 'hiatus' as soon as the next el Nino event occurs in the Pacific Ocean.

The second paragraph in the IPCC AR5 summary for policymakers relating to the surface temperature hiatus comes in the section on the evaluation of climate models:

> The long-term climate model simulations show a trend in global mean surface temperature from 1951 to 2012 that agrees with the observed trend (very high confidence). There are, however, differences between simulated and observed trends over periods as short as 10 to 15 years (e.g. 1998 to 2012) The observed reduction in the surface warming trend over the period 1998—2012 as compared to the period 1951—2012, is due in roughly equal measure to a reduced trend in radiative forcing and a cooling contribution from internal variability, which includes a possible redistribution of heat within the ocean (*medium confidence*). The reduced trend in radiative forcing is primarily due to volcanic eruptions and the timing of the downward phase of the 11-year solar cycle. However there is *low confidence* in quantifying the role of changes in radiative forcing in causing the reduced warming trend. There is *medium confidence* that internal decadal variability causes to a substantial degree the difference between observations and the simulations; the latter are not expected to reproduce the timing of internal variability. There may also be a contribution from forcing inadequacies and, in some models, an overestimate of the response to increasing greenhouse gas and other anthropogenic forcing (dominated by the effects of aerosols).[70]

The total radiative forcing or planetary energy imbalance is made up of the effects of greenhouse gases, anthropogenic and natural (volcanic) aerosols and solar irradiance. Several small eruptions were responsible for a cooling effect in the period 2008—2011 about twice as strong as that between 1999 and 2002. Looking at the fifteen years from 1998 to 2013, the net effect has been to depress temperatures in the second half of this period. Climate models do not include volcanic eruptions, which are inherently unpredictable although their effects can be accounted for

[69] Met Office, The recent pause in global warming (2) what are the likely causes? (July 2013). http://www.metoffice.gov.uk/media/pdf/q/0/Paper2_recent_pause_in_global_warming.PDF [accessed 15 October 2015].

[70] Stocker et al., *Summary for Policymakers*, p. 13.

retrospectively. Although models do include known solar cycles, the solar minimum in 2008 was lower than the previous two such minima and hence underestimated in the models. Ocean oscillations such as ENSO are also cyclical, but their exact timing remains difficult to predict and simulations are not expected to reproduce the resulting internal variability superimposed on the underlying temperature trend. On the basis of the scientific evidence put before the international panel—which as we have seen did not include some of the more recent studies published after the cut-off date for inclusion in the review—the authors of IPCC AR5 could not confidently assert that the underlying anthropogenic forcing had not been overestimated in some of the models. This probably accounts for the slight downward adjustment they made to the lower limit of the 'likely range' of the climate sensitivity figure compared to AR4.

On my analysis of the most recent report of the IPCC on the physical science basis of global warming, the central principle is the carbon budget approach: it is the total amount of carbon pollution for a given storyline rather than the height of the peak that correlates with the expected temperature rise. The physical constraints within which any solution must be designed include both the total carbon budget compatible with an acceptable probability of remaining under the temperature threshold and the maximum feasible rate of decarbonisation. Other relevant issues are the increased estimates of sea-level rise compared to the previous report and the increase in the effective radiative forcing of methane in the light of better understanding of feedback effects, which is relevant to calculations of the footprint of natural gas. The return to the level of uncertainty over the equilibrium climate sensitivity given in earlier reports, which had been narrowed down in AR4 seems to reflect ongoing academic controversy over the causes of the surface temperature hiatus, but does not warrant a relaxation of the carbon budget constraints for the achievement of a given temperature outcome.

Thus far we have construed the climate challenge as a technical scientific problem, in order to establish the scientific reality of anthropogenic global warming. Lord Nicholas Stern, author of the Stern Review[71] on the economics of climate change sums up this case as follows:

> The basic scientific conclusions on climate change are very robust and for very good reason. The greenhouse effect is simple and sound science: greenhouse gases trap heat, and humans are emitting ever more greenhouse gases. There will be oscillations, there will be uncertainties. But the logic of the greenhouse effect is rock solid and the long-term trends associated with the effects of human emissions are clear in the data. The arguments from those who would deny the science look more and more like those who denied the association between HIV and AIDS or smoking and cancer. Science and policy-making thrive on challenge and questioning; they are vital to the health of enquiry and democracy. But at some point it makes sense to move on to the challenge of policymaking and accept that the evidence is overwhelming. We are way past that point.[72]

The majority of theologians writing on this issue have taken the scientific evidence for anthropogenic global warming as entirely beyond dispute, beginning with this assumption rather than attempting to explain the scientific foundation for their theological projects. Similarly,

[71] Nicholas Stern, *The Economics of Climate Change: The Stern Review* (Cambridge, UK and New York: Cambridge University Press, 2006) http://webarchive.nationalarchives.gov.uk/+/http:/www.hm-treasury.gov.uk/sternreview_index.htm [accessed 15 October 2015].

[72] Nicholas Stern, *A Blueprint for a Safer Planet: How to Manage Climate Change and Create a New Era of Progress and Prosperity* (London: The Bodley Head, 2009), p. 33.

documents for bishops' conferences tend to begin with a disclaimer as to the scientific credentials of their authors. This approach displays appropriate academic humility in conversations where specialist knowledge of climate science or mathematical modelling is required, but such specialised knowledge is not essential to understanding the basic phenomenon of anthropogenic global warming. Public educational objectives are not enabled by persistent media-framing of the issue as a debate between technical experts. In order to shift this paradigm and allow currently excluded voices to contribute their creativity and moral intuitions to the debate on abatement policy, I suggest it could be socially constructive if more theological ethicists were conversant with the fundamental science of climate change and equipped both to scrutinise and to defend it. This is necessary in a Catholic context in order to play our part in implementing the call from the Church's magisterium to facilitate ecological conversion, to disengage from sinful social structures and to build a counter-culture of sustainable lifestyles. Transcending the artificial boundaries of contemporary academic faculties is fundamental to the theological task of reflecting on the signs of the times in the light of faith, and theologians with scientific backgrounds may be well positioned to promote clarity in public debate by articulating the relevant scientific concepts and presenting the evidence in an accessible form to enable more informed theological and socio-political engagement with the process of transition.

However before we take Lord Stern's advice and move on from the scientific evidence to the policymaking challenge, it will be helpful in order to fully appreciate the scale of the challenge ahead to summarise and explain the science behind the *carbon budget approach* to analysing the climate problem and designing appropriate evidence-based policy. Although in practice this approach has been known to policymakers since before COP-15 in Copenhagen, forming the basis of both the German WBGU proposal[73] for global burden-sharing at that conference and of advice from the UK-CCC to the UK Government on the implementation of the Climate Change Act 2008,[74] AR5 is the first IPCC report to summarise the science in terms of this methodology, which has major advantages over previous analytical methods in terms of the scientific robustness of policy recommendations and simplicity of application to the problem.

The Carbon Budget Approach

As Professor David MacKay—chief scientific advisor to the UK Department of Energy and Climate Change—has stressed,[75] the key message of AR5 is that the human-forced contribution to global

[73] 'Latest research shows that there is only a realistic chance of restricting global warming to 2°C if a limit is set on the total amount of CO_2 emitted globally between now and 2050 (CO_2 global budget). WBGU is moving this global budget to the forefront of its considerations in creating a new global climate treaty, which is due to be negotiated at COP 15 of the UN Framework Convention on Climate Change (UNFCCC) in Copenhagen.' WBGU (German Advisory council on Global Change) Special Report: Solving the climate dilemma: the budget approach (Berlin, 2009), p. 1. http://www.wbgu.de/fileadmin/templates/dateien/veroeffentlichungen/sondergutachten/sn2009/wbgu_sn2009_en.pdf [accessed 15 October 2015].

[74] Although the 2008 legislation was framed in terms of a contraction and convergence model aiming to calculate the required UK contribution to a global target of 80% reduction in carbon emissions by 2050, subsequent advice from the CCC has been expressed in terms of the carbon budget approach: Committee on Climate Change, *Carbon Budgets and Targets*, http://www.theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets/ [accessed 15 October 2015].

[75] 'One important message of this new report is that, while there remains some uncertainty about the precise sensitivity of the climate to greenhouse gas emissions, the impact on climate is largely determined by the cumulative total of humanity's carbon emissions. This means that waiting a decade or two before taking

temperature change depends upon our *cumulative emissions* of greenhouse gases. This insight is generally attributed to Professor Myles Allen's group at Oxford University who published an important paper on this in the prestigious journal *Nature* in 2009.[76] Up until that point, controversy had raged over the stabilisation level of atmospheric CO_2 that was compatible with a particular temperature target, and targets for pollution reduction by 2050 that would be required for climate stabilisation at that level. Climate justice campaigns like *350.org*[77] were organised around the idea that we should not allow concentrations to rise beyond 350ppm of carbon dioxide in the atmosphere. (In May 2013 the concentration measured at Mauna Lao exceeded 400ppm for the first time.[78]) Myles Allen's crucial insight was that the amount of CO_2 we add to the atmosphere for a given abatement pathway depends on the overall shape of the curve, rather than its height. Intuitively, this makes sense because the amount of pollutants produced overall will depend not only on the level they reach before we manage to start reducing emissions, but also on the lag-time—how long it takes before we succeed in reversing the current trend—and on the slope of the abatement curve: how rapidly we manage to reduce them thereafter. A measure of the amount of carbon pollution we add to the atmosphere is given by the area under the abatement curve, and the temperature increase we cause in so doing will be proportional to this amount. Rational climate policy should therefore seek to limit the 'cumulative emissions'—the total additional amount of carbon pollution—to less than the amount that corresponds to the temperature threshold the policy is designed to avoid, referred to as the total available 'carbon budget'.

This should be clear if we visualise several different storylines or scenarios about possible policy responses to climate change. Anyone can invent scenarios; we could speculate much more wildly than the IPCC and create more interesting 'possible futures': One (highly implausible) scenario—that favoured by technological optimists—is that we take no action now, relying on scientists to discover a novel mechanism to suck pollution out of the atmosphere at some point in the future. This storyline involves increasing emissions up to the point where the technological solution can be implemented—let's say 2050—followed by rapidly falling CO_2 concentrations thereafter. The political optimist's preferred scenario would be one under which an aggressive abatement pathway is agreed by all parties at COP-21 in Paris in 2015 and speedily implemented; this would give a curve that peaks around 2020 and declines comparatively gently thereafter (although not as comfortably as it might have had world leaders managed to reach this agreement at COP-15 in Copenhagen or at any of the intervening conferences of the parties). Lastly, one could conjure up an Armageddon scenario in which no one is prepared to agree on anything other than that it really is just too difficult

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climate change action will certainly lead to greater harm than acting now.' David MacKay, quoted in: Edward Davey, 'Response to Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5): The Latest Assessment of Climate Science', Department of Energy and Climate Change, 27 September 2013. https://www.gov.uk/government/news/response-to-intergovernmental-panel-on-climate-change-ipcc-fifth-assessment-report-ar5-the-latest-assessment-of-climate-science [accessed 15 October 2015].

[76] Myles R. Allen, David J. Frame, Chris Huntingford, Chris D. Jones, Jason A. Lowe, Malte Meinshausen and Nicolai Meinshausen, 'Warming caused by cumulative emissions towards the trillionth tonne' *Nature* 458 (30 April 2009), pp. 1163–1166. http://www.nature.com/nature/journal/v458/n7242/abs/nature08019.html [accessed 15 October 2015].

[77] http://350.org/ [accessed 15 October 2015].

[78] Fen Montaigne, 'Record 400ppm CO2 Milestone "feels like we are moving into a new era"', *The Guardian*, 14 May 2013. http://www.theguardian.com/environment/2013/may/14/record-400ppm-co2-carbon-emissions [accessed 15 October 2015].

not to have a war,[79] which then completely wipes out industrialised civilisation. Following this storyline emissions keep climbing until Armageddon day, and the rest is silence. So here we have three different abatement curves which differ as to the height of the peak, the time-lag before emissions start to drop and how steeply they decline. But let's say the area under the three curves is the same in each case (which is easily arranged as all three are imaginary). Then—as Myles Allen has shown in principle—the equilibrium temperature outcome would also be the same.[80] So a more useful number for policymakers than the height or timing of the peak or the rate at which emissions then decline is the total stock of atmospheric pollutants represented by any particular storyline. This quantity—which scientists call 'the scenario's cumulative emissions'—can be determined by calculating the area under the abatement curve, and it tells us what temperature increase to expect if we follow that storyline. Or at least it would do if we knew exactly how sensitive the climate is to the addition of each unit of pollution: which, unfortunately, we don't.

It would be really useful to those designing public policy if climate scientists were able to give a precise estimate of how much temperature change we should expect per unit of additional carbon dioxide released into the atmosphere. This would make it simple to calculate exactly what quantity of fossil-fuels we can burn and still achieve a given temperature target. In lieu of this still elusive number, as we have seen, IPCC AR5 gives an estimated range—1.5°C to 4.5°C—within which the climate sensitivity is likely to lie according to calculations made by the relevant experts. This does not completely exclude the possibility that the actual climate sensitivity might be lower or higher than the expected range, but the probability of it being much lower or higher is thought to be very low.

The fifth report does not specify a 'best estimate' for the climate sensitivity—the mode of the probability curve over the likely range—which AR4 puts at 3°C. Instead they calculate the total global carbon budget that would give us a 33%, 50% and 66% chance of avoiding warming of more than 2°C. Comparing this to the odds in a game of Russian roulette, that would be four bullets, three bullets and two bullets respectively in the cartridge of your six-shooter rather than just one. It works out that we can theoretically burn about a trillion tonnes of carbon (1000 GtC) in total over the whole of human fossil-fuel consuming history to have a 66% chance of staying below the two degree threshold and we have collectively consumed more than half that budget already since the onset of industrialisation. IPCC AR5 then adds some important caveats: this calculation takes no account of other greenhouse gases, reductions in aerosols or the potential release of methane gas from melting permafrost, all of which would result in a lower overall fossil-fuel burning budget.

Part 2: The nature and framing of the problem

The challenge for policymakers—which in a democratic society includes all of us—is to translate climate science into decarbonisation strategy. To comply with the United Nations Framework Convention on Climate Change (UNFCCC) strategies must follow the 'precautionary principle' and be designed to stabilise greenhouse gas levels in the earth's atmosphere at a level consistent with 'the prevention of dangerous anthropogenic interference with the earth's climate system'. Legitimate strategies need to be 'in accordance with science' and 'on the basis of equity'. It should be clear

[79] Blackadder explains the causes of the first world war: http://www.johndclare.net/causes_WWI1_Blackadderversion.htm [accessed 15 October 2015].

[80] Obviously we are assuming the weapons of choice of the belligerents in our Armageddon scenario don't complicate the picture by causing a nuclear winter effect.

from the foregoing that designing policy in accordance with our current scientific knowledge that gives even a rather poor probability of avoiding dangerous warming is already a tall order. In my judgement the clause in the UNFCCC that calls for observance of 'the precautionary principle' requires no further discussion: we are a long way past the point at which it might have been possible to leave a comfortable margin of error in the design of greenhouse gas abatement policy. However, although most governments now accept the fact of climate change—even in countries where public opinion remains sceptical—and defer to the IPCC as the body charged with assessing the now enormous volume of relevant scientific research, persistent deadlock has continued to be a feature of the international negotiations. The annual Conferences of the Parties—of which the latest at the time of writing is the upcoming COP-21 in Paris—have stalled over the question of 'climate justice': what exactly constitutes 'equity' under the UNFCCC has been an apple of discord between vulnerable states and key polluters.

What is 'climate justice'?

There are two central injustices of unabated climate change. The first is that many of the most vulnerable countries are currently low emitters of greenhouse gas pollution whereas it is the industrialised countries that are currently high emitters—and historically have been responsible for the lion's share of the accumulated stocks of carbon dioxide in the atmosphere—that have low exposure and well developed adaptive capacity. The second is that our generation has the power to compel future generations to accept the adverse consequences of our unjust and intemperate consumption of fossil fuels, both in terms of resource depletion and in terms of adverse consequences of the atmospheric accumulation of the resultant pollution. There is a huge and burgeoning literature on climate justice issues and it is beyond the scope of this thesis to give a systematic review of the field. My purpose here is merely to sketch the main concepts insofar as they contribute to the case for rapid global decarbonisation, and hence also pertain to the case for action to secure much wider and better informed participation in the transition process than would be necessary if the problem were isolated or of limited impact rather than systemic, intractable and potentially catastrophic.

If, as I have argued, the scientific evidence alone shows that we are past the point at which we have the luxury of being able to guarantee the avoidance of dangerous outcomes with a comfortable margin of error, demonstrating that a significant body of professional opinion amongst economists and legal scholars as well as scientists favours fast and deep cuts in carbon emissions—a project that can only be achieved with sustained and substantial cross-partisan support—will suffice to answer the second of the three questions we have identified as crucial to my argument for the approach of this thesis. Issues central to the climate justice debate, and hence key to making my case for a religious value-led societal engagement with the ecological crisis, include vulnerability, historical responsibility, development rights and intergenerational justice.

Vulnerability to the negative impacts of climate change depends on a combination of *exposure* and *capacity* to adapt. Exposure is a question of natural and human geography—proximity of population centres to widening flood zones as sea levels rise, how much of the national economy depends on production of staple crops that are more at risk as temperatures rise and droughts become more common, to what extent citizens' water-supply is dependent on disappearing glaciers. Adaptive capacity is roughly proportional to the wealth of the nation, although in reality it depends on networks of communication and logistics, levels of government corruption, respect for the rights and

welfare of citizens and other indicators of resilience. A central irony of climate change is that wealth creation in the industrial era has been proportional to the generation of carbon-dioxide pollution through the burning of fossil-fuels and hence—to a first approximation—those least responsible for the problem also have the lowest adaptive capacity. Some of the poorest countries, by virtue of their geography are also highly exposed to the earliest and ultimately the worst impacts of unabated climate change. Unsurprisingly, in the international negotiating arena, such nations have tended to prioritise the construction of a compensation mechanism to compel the industrialised nations to take responsibility for negative climate impacts as a matter of justice.

The UNFCCC requires nation states to accept costs of adaptation and abatement proportionate to their 'common but differentiated responsibilities and respective capabilities and their social and economic conditions.'[81] The language of the Framework Convention clearly requires the industrialised countries to accept a heavier overall cost burden to reflect differences in historical responsibility for the stocks of polluting gases in the atmosphere as well as their consequent advantages in adaptive capacity and level of development. The Convention is however open to different interpretations: an equitable outcome could have been achieved for example by the industrialised countries 'taking the lead' in making substantial cuts in emissions whilst developing countries were allowed a certain amount of 'headroom' to address development priorities crucial to the welfare of their vulnerable populations: this was the thinking behind the Kyoto Protocol, which placed early abatement responsibilities on the shoulders of an Annex I list of the world's wealthiest nations. However, given that the Protocol was never ratified by the US Senate, it proved impossible to make meaningful progress towards global decarbonisation during the Kyoto period. This leaves us in a situation in which the only mechanism still open for compliance with the Framework Convention is a treaty under which all parties simultaneously embark upon an aggressive and immediate programme of abatement action, and agree on some form of 'loss and damage mechanism' through which the differentiated responsibilities and disparities in wealth and adaptive capacity acknowledged in the UNFCCC are recognised and compensated for.

In their book *Climate Change Justice*, American scholars Eric Posner and David Weisbach argue that issues of redistributive and compensatory justice should be set aside, and this was the stance adopted by US negotiator Todd Stern at the Warsaw conference of the parties, COP-19. Posner and Weisbach argue that the best and possibly even the only hope of securing an international agreement is a 'forward looking' agreement (which is to say one that ignores historical emissions responsibility) that can be endorsed by every party individually as in accord with its own interests. As they put it: 'we need to think about how to solve the climate problem in a way that even selfish states would agree to.'[82] Selfishness, on their view, is not a moral failing when applied to negotiations between nation states, it is both an unavoidable feature of political reality and—as they seem to imply—compatible with international justice. They flatly state that 'no climate change agreement will be feasible if it amounts to a massive transfer of resources from wealthy nations to China and India'[83] and that schemes with wealth redistributive consequences cannot secure American assent since they involve trusting 'corrupt governments to manage vast resources—billions of dollars of permits, for example—and to enforce rules against their wealthy cronies, such

[81] *United Nations Framework Convention on Climate Change*, Article 3.1.

[82] Posner and Weisbach, *Climate Change Justice*, p. 138.

[83] Posner and Weisbach, *Climate Change Justice*, p. 191.

as the owners of greenhouse gas emitting factories.'[84] Of course the problem of corrupt government is not one peculiar to developing countries.

The 'welfarist' paradigm proposed by Posner and Weisbach—as I have argued elsewhere[85]—oversimplifies the justice issues and ignores the human rights dimension of unabated climate change as well as the clear and unambiguous implications of the Framework Convention, to which the USA is a party. Posner and Weisbach argue that 'the climate change problem poorly fits the corrective justice model'[86] and—commenting on the issue of culpable negligence by the Bush administration—they appear to accept the findings of the Congressional investigation,[87] yet offer the following justification:

> A more reasonable and serious criticism of American policy until very recently is that the US government did not take seriously the risk of climate change, may have deliberately downplayed the risks when government officials knew better, and did not try to use its diplomatic power to advance climate treaty negotiations an much as it should have. Maybe; but a reasonable alternative hypothesis is that the United States was just trying to exercise its bargaining power so that any eventual treaty would be more favourable to its interests than otherwise. It is farfetched to say that such common state behaviour is negligent.[88]

Yet on the basis of the evidence of systematic and deliberate interference with the EPA, suppression of climate science and alteration of testimony before Congress documented by Wood,[89] it does not seem at all farfetched to say that the US government behaved in a manner that was both negligent—even culpably reckless—towards all those amongst the global poor whose vital and immediate interests are imperilled by the climate emergency, and a clear case of abuse of power that favoured the economic interests of partisan lobbying groups over the security, lives and livelihoods of ordinary Americans, many of whom live in coastal cities that are acutely vulnerable to rising sea-levels[90] along with increased frequency and intensity of storms in a warming world. Far from making any eventual treaty likely to be more favourable to US interests than it might otherwise have been, this behaviour is likely to have heightened hostility towards America and her allies and

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[84] Posner and Weisbach, *Climate Change Justice*, p. 177.

[85] Jacaranda Turvey, Book Review: Eric A. Posner and David Weisbach, Climate Change Justice (Princeton; Oxford: Princeton University Press, 2010), *Studies in Christian Ethics* 23 (November 2010), 464-468. http://sce.sagepub.com/content/23/4/464.citation?patientinform-links=yes&legid=spsce;23/4/464 [accessed 15 October 2015].

[86] Posner and Weisbach, *Climate Change Justice*, p. 103.

[87] United States House of Representatives Committee on Oversight and Government Reform, 110th Congressional Report: Political Interference with Climate Science Under the Bush Administration (18 December, 2007) http://earthjustice.org/sites/default/files/library/reports/house-of-representative-2007-majority-report-on-climate-change-science.pdf [accessed 14 October 2015]; quoted in Mary Christina Wood, *Nature's Trust: Environmental Law for a New Ecological Age* (New York: Cambridge University Press, 2014), p. 25 n. 20.

[88] Posner and Weisbach, *Climate Change Justice*, p. 114.

[89] Wood, *Nature's Trust*, p. 25.

[90] 'Scientists have spent decades examining all the factors that can influence the rise of the seas, and their research is finally leading to answers. And the more the scientists learn, the more they perceive an enormous risk for the United States.' Justin Gillis, 'The Flood Next Time' *New York Times*, 13 January 2014 http://www.nytimes.com/2014/01/14/science/earth/grappling-with-sea-level-rise-sooner-not-later.html?hpw&rref=science&_r=1 [accessed 15 October 2015]

impacted negatively on global security. At the very least, it obstructed the process of international climate negotiations, delaying the achievement of a global abatement agreement.

On the issue of intergenerational justice Posner and Weisbach make a compelling argument for a principle of intergenerational neutrality that values present and future people equally and hence, in economic cost-benefit analysis of carbon abatement projects, future benefits should be discounted at a rate that reflects only the expected market return on investment. On this basis they judge Lord Stern's discounting rate of 1.4% to be approximately correct (although they arrive at a similar number for entirely different reasons) and regard William Nordhaus's larger discounting rate as 'implausible given the mathematics of averaging over uncertainty.'[91] Lord Stern famously argued for aggressive greenhouse gas abatement on the basis of economic cost-benefit analysis; Posner and Weisbach similarly conclude that 'global emissions reductions at a fairly stringent level likely pass a cost-benefit test'[92] and 'unfortunately we may need fast and deep cuts in emissions.'[93]

Indeed, grasping the scale of the problem—which can be quantified reasonably clearly using the carbon budget approach as discussed earlier—suggests two possibilities. The first is that the climate challenge can be met if we are able to mobilise and engage the general public to grasp the opportunity—in collaboration with others in the global community—to embark on a voyage of transition to the safe haven of a sustainable future. On this view, the issue is inadequately framed as a technical challenge to be addressed by experts with the relevant competencies: it presents a much broader and more fundamental crisis with inescapable and potentially perilous implications for all citizens and families, communities and Nation States, although not all are equally the cause of the problem and some will suffer earlier and worse consequences of a collective failure to address it.

The second possibility which needs to be confronted is that the window of opportunity for implementing a solution has already closed and there are no realistic routes to sub-catastrophic outcomes. As can be seen when the climate challenge is analysed using Allen's carbon budget methodology, there is nothing unduly alarmist about raising this possibility. Scientists convene conferences specifically dedicated to unpacking the implications of just such a prognosis.[94] Scientists are trained to privilege reason over emotion and to adopt an attitude of detachment towards their subject matter. Those who are temperamentally inclined towards careers in science tend to cluster towards the introverted end of the personality spectrum and to exhibit lower than average levels of expressed emotion. Alarmism does not come naturally to such individuals. There is something rather surreal about passionless scientific debates that take seriously the possibility of a collective human failure to address the climate crisis and speculate over whether or not the window of opportunity for action to avert unthinkable catastrophe may already have closed.

If the climate problem is inherently intractable and tragic outcomes are unavoidable (as some have argued) is there any point to further analysis of the merits of different pathways to energy systems transition? During the Bali conference Pulitzer Prize-winning reporter and veteran commentator on

[91] Posner and Weisbach, *Climate Change Justice*, p. 153.

[92] Posner and Weisbach, *Climate Change Justice*, p. 20.

[93] Posner and Weisbach, *Climate Change Justice*, p. 21.

[94] 4 Degrees and Beyond: International Climate Conference, Oxford University 28–30 September 2009 https://podcasts.ox.ac.uk/series/4-degrees-and-beyond-international-climate-conference [accessed 15 October 2015].

the climate crisis Ross Gelbspan articulated the 'reasonable despair' experienced by many informed observers of the international negotiations:

> We have failed to meet Nature's deadline. In the next few years the world will experience progressively more ominous and destabilising changes. These will happen either incrementally—or in sudden abrupt jumps….There is no body of expertise, no authoritative answers for this one. We are crossing a threshold into uncharted territory. And since there is no precedent to guide us, we are left with only our own hearts to consult, whatever courage we can muster, our instinctive dedication to a human future—and the intellectual integrity to look reality in the eye.[95]

Continuing the quest for climate solutions depends upon resolving this question in favour of the former possibility: that the challenge—although daunting—is not yet beyond all hope of containment. However the latter possibility should not be dismissed too glibly. The remaining uncertainties as to the exact value of the climate sensitivity and the proximity of tipping points make the question at once *reasonable* and *rationally underdetermined* on the basis of the existing evidence. Intellectual integrity requires us to face up to the possibility of failure and the catastrophic consequence this would entail. The phenomenon of 'rational despair' is known amongst environmental activists as 'the second glass of wine perspective' in honour of Chris Goodall's description of the disparity between the relentlessly positive public presentations of climate specialists compared to their somewhat less inhibited analysis of the problem over drinks afterwards:

> When speaking in public, almost all specialists engaged in the climate change debate offer a positive and hopeful view of the world's ability to tackle climate change. They know that if they say that the situation is too awful and frightening they will lose the sympathy of the audience. Speakers have to be relentlessly upbeat, stressing the capacity of the world to reduce its use of fossil-fuels whilst still improving prosperity around the globe. With a few exceptions, the public stance of climate change experts is that global warming is within our control, at least for the next few years.
>
> There is often a reception after the speech and the scientist or politician speaker will stay to chat with the people who came to the talk. Glasses of indifferent wine are passed around and the conversation moves to the actions the world needs to undertake to avert the potential for unmitigated catastrophe. I have been to many of these events, and I have noticed the same thing happen on almost every occasion. Winding down after the talk, the speaker sips the first glass and continues to say that the climate problem is within the capacity of the world to solve. But as he or she reaches for a second glass, and the alcohol starts to loosen inhibitions, the speaker begins to offer a less cheerful view. The slow pace of change in attitudes among the world's political elite is witheringly dissected. (I would use the word 'glacial' to describe the rate of progress, but since the Greenland glaciers now move several kilometres a year this adjective is far too generous.) The speaker notes the mounting evidence that the relatively small increases in average temperature we have already seen are having some surprisingly dramatic effects. The Arctic will probably have ice-free summers within a decade, major Asian rivers are likely to dry up for several months a year, biodiversity is declining at an accelerating rate, and increases in crop yields are slowing as drought, rising salinity and increasing temperatures affect

[95] Ross Gelbspan, 'Beyond the Point of No Return: It's Too Late to Stop Climate Change, Argues Ross Gelbspan—So What Do We Do Now?' (Grist, December 11, 2007) http://grist.org/article/beyond-the-point-of-no-return/ [accessed 15 October 2015].

> vulnerable plants. The speaker now says what he or she really believes: the world is not ready to make the adjustments necessary to control climate change.[96]

Goodall is a technological optimist who is upbeat about the prospects for unproven carbon sequestration projects—without which the UK strategy to decarbonise the grid would fail to add up, since it relies on switching from coal to gas in the short-term with the potential to retro-fit gas power-plants with carbon capture and storage facilities in the future—and his book enthuses over the possibilities inherent in an array of different technological innovations that hold out hope of steering a course to a sustainable future. Clearly, in his view we have not 'failed to meet Nature's deadline' as Gelbspan laments. Yet Goodall admits that when he gives talks on climate change he always refuses the second drink after the speech, for fear of letting his own worries show.[97] There may be wisdom in this approach, although it runs the risk of preaching hope to complacency. The fear of collective failure to rise to this challenge is not irrational or alarmist; admitting to it is not cowardice, delusion or superstition. Of the numerous possibilities open to human civilisation for self-destruction, simply failing to grasp what opportunity remains to transition to sustainable energy technologies may yet be the possibility that inexorably plays out, as this generation struts and frets its hour upon the stage, heedless of the needs of the vulnerable or of unborn generations. But there is nothing to be gained by dwelling on this outcome as though it were inevitable since—if it is not—one risks allowing the idea to become self-fulfilling and—if it is—nothing is lost in the attempt to avoid it that is not in any case already lost.

Greenpeace campaign strategist Chris Rose has argued that the framing of climate change as a scientific phenomenon has been unhelpful in building a civil society movement to advocate for change, and the stratospheric political level at which it has been tackled—through a process of negotiations between governments at a series of international 'conferences of the parties'—has obstructed the kind of public 'ownership' of the issue that is a hallmark of successful campaigns.[98] As I have argued earlier in this chapter, framing the issue in terms of welfarist economic assumptions seriously misconstrues the nature of the justice issues involved, and hence a deeper engagement with the climate challenge from ethicists and theologians would be helpful especially in advocating the cause of those vulnerable populations most exposed to the impacts of unabated global warming. For Roman Catholic moral theologians, a central principle of faith is the need to put into practice an *option for the poor* in the light of Our Lord's instruction that we should work and live with and for the most vulnerable, enabling them to advocate on their own behalf and pleading their cause where their voices would otherwise go unheard. Whilst both Protestant and Catholic scholars have produced valuable work on climate change, and religious NGOs such as CAFOD and Christian Aid as well as environmental groups have been active in the climate justice movement, it remains the case that the public debate is dominated by technical issues: mainly over the credibility of climate science and economic cost-benefit analysis of policy proposals. As Wood argues:[99]

> Religion offers multifaceted contributions to the environmental movement of the new millennium. Passionate preachers and spiritual leaders can activate entire congregations behind policy agendas in a

[96] Chris Goodall, *Ten Technologies to Save the Planet* (London: Green Profile, 2008), pp. 2–3.

[97] Goodall, *Ten Technologies*, pp. 4–5.

[98] Chris Rose, Greenpeace Campaign Strategy http://www.campaignstrategy.org/articles/climate_difficulty.html [accessed 15 October 2015].

[99] Wood, *Nature's Trust*, p. 278.

> way that impersonal email appeals from advocacy groups may not be able to. Moreover, Gottlieb contends that, because the present ecological crisis reflects fundamentally a crisis of spiritualism, religion stands uniquely positioned to prompt change in personal attitudes and behaviour. Today's problems, he points out, cannot be resolved by political, economic or technical fixes alone, as they manifest a 'profound and wide-ranging failing of virtually every aspect of modern society.'
>
> The moral vision of religion, Gottlieb suggests, can urge a fundamental shift in basic values from overconsumption to a simple needs-based lifestyle—both by rejecting the former as unethical and by embracing the latter as spiritual. Perhaps singularly, religion can inspire personal change despite cognitive recognition that individual action counts little in relation to the problem as a whole. Gottlieb writes: 'The willingness to resist requires a kind of faith that one's actions make a difference, even if it is hard to see what that difference is. We [find God in] a faith that reflects a passionate choice rather than a reasoned account of current social forces and trends.' As a practical matter, too, religious communities offer a welcoming annex in which families and individuals can practice new lifestyles, some of the communally supported; church kitchens and gardens can build support for local, organic food; congregations can aggregate their individual change to produce significant cumulative results on a path of carbon reduction. Finally, as Gottlieb points out, religion can overcome the personal hopelessness that shadows daunting global economic predicaments. Religious life, he asserts, equips a believer to deal with the full range of emotions that inevitably pour forth in the wake of environmental collapse—a range that will doubtless include shame, despair, fear, grief, anger and denial. He writes: 'It is the job of religion to lend a hand precisely when things seem darkest.'[100]

Notwithstanding the efforts and enthusiasm of the Transition Towns Movement, polls continue to show scant public appetite for behaviour change[101] and politicians treat this as an inflexible constraint on policy options. It is a common observation within the Green Party of England and Wales that public support for rational environmental policy is found to be weak unless it is framed in terms of job-creation and other short-term benefits, and candidates are often caricatured as environmental extremists with a poor grasp of 'economic realities'. This is interesting because it indicates the extent to which the nature of the climate crisis as an issue crucially concerning the future prospects—including the economic interests, security and welfare—of individuals and families can be obscured by the technical framing of the public debate. A paradigm shift in public awareness is needed to reframe the issue as a project that ordinary people have both a right and a duty to play their part in bringing to fruition for the common good.

As we have seen in the previous section of this chapter, any solution to the global climate challenge that respects the obligation to stabilise temperatures below some accepted threshold between tolerable and dangerous interference with the planetary climate will need to conform to science-based requirements: The total global use of fossil-fuels to drive economic growth must respect the maximum carbon budget compatible with the temperature threshold. In addition, the slope of the abatement curve—which indicates the rate at which fossil-fuel use declines—must not exceed the maximum feasible rate at which a complex global economy can be transitioned to sustainable energy alternatives. Any proposed solution that transgresses these boundary conditions necessarily risks all its eggs in the basket of science-fiction solutions involving removal of carbon dioxide from

[100] Roger S. Gottlieb, *A Greener Faith: Religious Environmentalism and Our Planet's Future* (Oxford: OUP, 2006), pp. vii-viii, xx, 7, 11, 17; quoted in Wood, *Nature's Trust*, pp. 278–279.

[101] Giddens, *The Politics of Climate Change*, p. 101.

the atmosphere or other forms of geo-engineering.[102] Far from sharing the enthusiasm of advocates for such solutions,[103] I am inclined to agree with Lawrence Summers that geo-engineering necessarily involves 'the kind of intrusion into a highly complex ecosystem that we should all fear most.'[104] The UN framework convention on climate change commits signatories to avoiding dangerous anthropogenic interference with the planetary climate system, not experimenting with other forms of high-risk interference.

The mismatch between a science-based description of the climate challenge and the understanding of 'economic realists' is clearly seen in the following extract from a paper by Harvard Professor of International Economics, Richard N. Cooper, in which he argues against a science-based abatement regime proposed by Axel Michaelowa:

> Michaelowa explicitly rejects a benefit-cost approach to public policy in dealing with global climate change in favour of an absolute (indicative) ceiling to atmospheric concentrations of greenhouse gases, mainly but not exclusively carbon-dioxide. This approach implies an extreme degree of risk aversion with respect to climate change—any cost to avoiding it is worth the price—about which every economist should be sceptical. Moreover, ordinary citizens will in practice reject this approach—they will not be willing to bear any cost to reduce emissions enough to stabilise concentrations. Policy analysts should acknowledge this from the outset. The price citizens will be prepared to pay will initially be modest; it may grow as hard evidence of the costs of climate change accumulate, but even then it will not become infinite, not least because those who will be expected to bear the brunt of the cost of reducing emissions may not be those who will incur the greatest damage from climate change. This approach implicitly places climate change above all other social objectives, and it implies a degree of global communitarianism that does not exist today and is unlikely to come into being within the next decade, when a post-Kyoto Protocol regime must be negotiated.[105]

One might agree with the overall case Cooper makes for carbon taxation—as a policy alternative with some advantages over a cap-and-trade mechanism for greenhouse gas abatement—and concede that rational public policy requires some form of cost-benefit analysis of the economic and ecosystemic impacts of climate change compared to the costs of abatement (logically an assessment of this kind must underpin our characterisation of it as 'dangerous' and motivate our desire to avoid

[102] 'Methods that aim to deliberately alter the climate system to counter climate change, termed geo-engineering, have been proposed. Limited evidence precludes a comprehensive quantitative assessment of both Solar Radiation Management (SRM) and Carbon Dioxide Removal (CDR) and their impact on the climate system. CDR methods have biogeochemical and technological limitations to their potential on a global scale. There is insufficient knowledge to quantify how much CO_2 emissions could be partially offset by CDR on a century timescale. Modelling indicates that SRM methods, if realizable, have the potential to substantially offset a global temperature rise, but they would also modify the global water cycle, and would not reduce ocean acidification. If SRM were terminated for any reason, there is high confidence that global surface temperatures would rise very rapidly to values consistent with the greenhouse gas forcing. CDR and SRM methods carry side effects and long-term consequences on a global scale.' Stocker et al*., Summary for Policymakers*, p. 27.

[103] Scott Barrett, 'A multitrack climate treaty system' in: Aldy and Stavins, *Architectures for Agreement*, pp. 237–259, at pp. 245–246.

[104] Lawrence Summers, 'Foreword' in: Aldy and Stavins, *Architectures for Agreement*, pp. xviii–xxvii, at p. xxiv.

[105] Richard N. Cooper, 'Alternatives to Kyoto: the case for a carbon tax' in: Aldy and Stavins, *Architectures for Agreement*, pp. 105–115, at p. 105.

it)[106] yet at the same time find this paragraph troubling. On the one hand this could be seen as a restatement of Giddens's paradox: 'since the dangers posed by global warming aren't tangible, immediate or visible in the course of day-to-day life, however awesome they appear, many will sit on their hands and do nothing of a concrete nature about them. Yet waiting until they become visible and acute before being stirred to serious action will, by definition, be too late.'[107] Policy analysts certainly need to recognise this as a potential problem. On the other hand, the statement appears to disregard the scientific reality that setting some absolute ceiling on carbon emissions is—logically—the only way to prevent *catastrophic climate change*, which we might define (to distinguish our use of it from mere environmental doom-mongering) as 'that level of global warming theoretically sufficient to overwhelm the pursuit of any other development objective'. This is because if carbon emissions are not capped the stocks of pollutants in the atmosphere will continue to rise and the planet will continue to warm. It cannot be said to be 'alarmist' to conclude that if this continues indefinitely temperatures will necessarily eventually reach a critical point—there is some authority for estimating this at 4°C—beyond which further warming is reasonably expected to have overwhelmingly destructive consequences, and not merely for those vulnerable populations who are most exposed to earlier impacts.[108]

In view of this, it seems reasonable to make an estimate of the total global emissions budget that is compatible with a very high probability of avoiding 4°C and to regard this as an absolute limit with which any proposed solution must comply.[109] The cost of building a 'safe' future is the cost of limiting fossil-fuel consumption to at most that budget that results in 2°C of warming. The cost of building *any future at all* is the cost of limiting fossil-fuel consumption to the 4°C carbon budget.

Constructing the challenge in this way demonstrates the key point that this section seeks to establish: that what we are facing is not merely a technical problem to be addressed by experts, but an ecological emergency with which every citizen has both the right and the responsibility to engage. It is a moral problem, to which our religious worldviews and value systems are acutely relevant, because of the intergenerational and international justice issues raised by every proposed solution, and because of the existential threat inherent in a collective failure to act. A great deal more is potentially at stake than 'climate justice'. This is not to suggest that a just outcome is not something

[106] Nicholas Stern makes the case that rapid decarbonisation of the global economy such as to comply with the 2°C threshold is economically rational on the basis of cost-benefit analysis: Stern*, The Economics of Climate Change;* Stern*, Blueprint*. Posner and Weisbach note that 'almost all studies indicate that at least a modest reduction in emissions is cost-beneficial and a number of studies indicate that fast and deep emissions reductions are needed.' Posner and Weisbach, *Climate Change Justice*, p. 21. This analysis is disputed by other economists, notably Richard Tol, William Nordhaus and Nigel Lawson.

[107] Giddens, *The Politics of Climate Change*, p. 2.

[108] 'The immediacy and scale of the reductions necessary to avoid anything below 4°C, and indeed the human and ecosystem implications of living with 4°C, are beyond anything we have been prepared to countenance. Understanding the implications of 4°C and higher temperatures is essential if global society is to make informed choices about the balance between "extreme" rates of mitigation and "extreme" impacts and adaptation costs.' *4 Degrees and Beyond: International Climate Conference.*

[109] The pre-Copenhagen approach taken by the UK Climate Change Committee in 2009, in calculating the UK's contribution to global emissions reductions was based on a carbon budget that would give only a 50% chance of keeping temperature rises below 2°C, but ensured a 99% probability of not exceeding 4°C on the basis of the state of scientific understanding at the time: Committee on Climate Change, Progress Report to Parliament October 2009, 'Meeting Carbon Budgets—The Need for a Step Change', p. 35. http://archive.theccc.org.uk/aws2/21667%20CCC%20Report%20AW%20WEB.pdf [accessed 15 October 2015]

to which we should aspire, but merely a way of spelling out the ultimate bottom line: some potential outcomes are merely undesirable—and hence worth avoiding if this can be done at a cost proportionate to the loss they represent—other outcomes are unfair to others, but beyond a certain point the expected consequences of further warming are such that even absolutely Herculean efforts to keep within that boundary are warranted.

The technical challenge involved in transitioning global energy systems to sustainable sources is enormous in itself, as David MacKay has shown.[110] As we have seen, according to David Hone[111] the current pace of decarbonisation is about half that which would be required to follow the IPCC AR5 'worst case scenario'—RCP 8.5—to a 4°C outcome. Analysis by Price-Waterhouse Cooper calculates that at the current rate of decarbonisation of 0.7% per annum the carbon budget for a 2°C outcome represented by RCP 2.6 will have been consumed by 2034, just two decades from now.[112] In addition there is the political challenge involved in creating the framework within which a technical solution can be constructed. This requires a level of public support for abatement action that can be sustained through changes in government and in economic climate, to ensure an on-going democratic mandate and a reliable investment framework for energy alternatives. Clearly within different cultural contexts and political systems the challenge is not identical, but at least within Western democracies—which remain amongst the highest per-capita polluters as well as having the largest historical responsibility for existing stocks of pollutants—it seems reasonable to suggest that any solution that gives us confidence of avoiding 4°C will require more stability for investors in renewable energy and more reliable public support for the required energy transition than exists currently in the UK or the USA. On David Hone's analysis a tenfold increase in the current rate of decarbonisation is required for a safe passage and more than a twofold increase to ensure a sub-catastrophic outcome. There is a long list of options for improving on current performance including removing incentives that artificially bias the market towards further exploitation of fossil-fuels, creating incentives for renewables, building infrastructure to support electric mobility and safe cycling to name just a few. But the political challenge is immense and our governments do not—thus far—seem capable of rising to it.

For these reasons I would conclude that constructing a solution to ensure even a minimally acceptable climate outcome is, to say the least, a truly epic challenge. The technical problems involved in designing and constructing sustainable energy systems are non-trivial but in principle solvable. The social challenge of creating the necessary framework for the decommissioning of fossil-technology at a rate compatible with a reasonably benign future climate may present a bigger hurdle. Achievements over the past two decades have been slow, superficial and largely symbolic;[113] over the next two decades we will need to achieve rapid and systemic changes. Given the thermal inertia of the global climate system, any proposed solution that delays the onset of serious action and relies on making more rapid changes later is not likely to be technically feasible or compatible

[110] David MacKay, 'Saving the Planet by Numbers', BBC News, 23 April 2009.

[111] David Hone, 'Is there cause for optimism on emissions?', 8 November 2013 http://blogs.shell.com/climatechange/2013/11/optimism/ [accessed 16 December 2015].

[112] Alan Neuhauser, 'Firm warns of severe consequences from climate change', US News, 12 September 2014 http://www.usnews.com/news/blogs/data-mine/2014/09/12/pricewaterhousecoopers-warns-of-severe-consequences-from-climate-change [accessed 15 October 2015].

[113] Posner and Weisbach, *Climate Change Justice*, pp. 59–73.

with avoiding dangerous global warming and the window of opportunity for avoiding catastrophic outcomes is by no means comfortably wide.

To sum up the argument of this section: my aim has been to argue for theological engagement with the climate crisis, in the hope of wresting the issue from the exclusive grasp of technical specialists and political elites and to reconstruct the challenge of climate stabilisation as an historic opportunity to be part of a collaborative project for the global common good. As we have seen, this challenge has moral and existential dimensions and needs to engage and maintain citizen participation on the basis of deeply held cultural loyalties and value-systems. Framed as such the ecological challenge requires a new approach beyond the limitations of the current combination of academic reports, high level conferences and expert testimony as drivers—thus far very inadequate drivers—of systemic social and economic change.[114] This needs to include widespread grass-roots reflection from different religious perspectives linked to effective communication strategies and concrete proposals for action, to change the paradigm that has hitherto dominated the public debate and manifestly failed to motivate change on a scale proportionate to the size of the challenge. Ecotheology—once seen as a specialist academic niche for a rare breed of theologians from scientific backgrounds—needs to play a less marginalised and taciturn role. Reflecting theologically on this crucial issue and applying the deepest wisdom of our cultures to the social task of addressing it needs to become a mainstream collective endeavour for theologians. This thesis proposes a novel contribution to this global project, based on confrontation of the problem from within the conservative Catholic worldview and value-system constructed by Germain Grisez.

Section 3: Is the climate crisis a 'sign of the times'?

As we have seen in Section One, a robust scientific case can be made for decommissioning fossil-fuel energy infrastructure in order to limit anthropogenic global warming. Section Two established that rapid decarbonisation of the global economy is essential to avoid 'dangerous' interference with the earth's climate system, as required under article 2 of the UNFCCC, with a 2^{o}C rise in global average surface temperature as the internationally accepted threshold we are required to avoid. In order to achieve this Herculean task within the available timeframe—if this remains possible at all—I have argued that the transition project needs to be construed as a societal moral enterprise rather than framed as the exclusive domain of technical experts and high-level government negotiators. There is a need to engage ordinary citizens in a transition process that crucially affects the interests of individuals and their families. Having made this overall case in the previous two sections, my aim here is to answer two questions that pertain specifically to projects within the field of Roman Catholic ecotheology: (1) whether the climate crisis should—in principle—be regarded as a 'sign of the times' and (2) whether the magisterium of the Roman Catholic Church has—in fact—construed it as such. It is crucial to the whole enterprise of Catholic theological engagement with the climate issue that the first of these two questions can be answered in the affirmative. If I can—in answer to the second question—establish on the documentary evidence that not only left-leaning ecotheologians but also the official teaching authority of the Church have accepted the ecological question generally and the climate crisis in particular as a 'sign of the times', I shall be in a position to conclude that the articulation of a conservative Catholic ecotheology consistent with Grisez School methodology—the task of this thesis—can make an important contribution to the field.

[114] Giddens, *The Politics of Climate Change*, p. 197; quoting Anne Mettler, *From Why to How*, (Brussels, Lisbon Council, 2008), p. 1.

Meeting the criteria for classification

For Jame Schaefer—Associate Professor of Systematic Theology and Ethics at Marquette University in the United States and convenor of the Catholic Theological Society of America's Interest Group on Global Warming—and for other members of the collaborative project under her direction which aims to research and articulate a Catholic theological response to the climate crisis,[115] a calling by God to be responsive to contemporary moral issues and 'signs of the times' is inherent in our vocation as theologians.[116] In order to establish that the climate crisis is an issue upon which we have a mandate as Catholic theologians to reflect in the light of the truths of faith, we first need to ask whether the ecological crisis generally—and the global warming phenomenon as a subsidiary challenge—qualifies as a 'sign of the times' as this phrase is understood in Catholic social teaching.

The phrase 'sign of the times' originates from Matthew's Gospel which criticises those who 'know how to interpret the appearance of the sky' but 'cannot interpret the signs of the times.'[117] According to Thomas Nairn,[118] it was first used in Vatican social teaching by Pope John XXIII in his Christmas message of 1961 and became an organising principle of his encyclical *Pacem in Terris*,[119] in which each chapter closes with a reflection on the characteristics of present day circumstances which can be classified as 'signs of the times.' *Gaudium et spes* (The Pastoral Constitution on the Church in the Modern World)[120] —the final document issued by the Second Vatican Council—called for the Church to scrutinise the signs of the times and then to interpret them in the light of the gospel. This has been interpreted as a major methodological shift,[121] even a 'bombshell'[122] to those accustomed to the Catholic vision of nature and society expressed in abstract traditional natural law categories; Nairn argues that it moves Catholic social teaching towards an approach based on human interdependence beginning with the empirical data of human experience. The Council's vision stresses the central dignity of the human person, interpreted through an incarnationalist Trinitarian theology, bringing the Church into the heart of human life where Christians—individually and

[115] The fruits of this project are published in her edited volume: Jame Schaefer ed., *Confronting the Climate Crisis: Catholic Theological Perspectives* (Milwaukee, WI: Marquette University Press, 2011)

[116] Schaefer, *Confronting the Climate Crisis*, p. 9.

[117] Matthew 16: 3b.

[118] Thomas A. Nairn O.F.M., 'The Roman Catholic Social Tradition and the Question of Ecology' in: Richard N. Fragomeni and John T. Pawlikowski (eds.), *The Ecological Challenge: Ethical, Liturgical and Spiritual Responses* (Collegeville, MN; The Liturgical Press, 1994), p. 30.

[119] John XXIII, *Pacem in Terris*, On Establishing Universal Peace in Truth, Justice, Charity and Liberty, 11 April 1963. http://w2.vatican.va/content/john-xxiii/en/encyclicals/documents/hf_j-xxiii_enc_11041963_pacem.html [accessed 15 October 2015].

[120] Paul VI, *Gaudium et spes:* Pastoral Constitution on the Church in the Modern World, 7 December 1965 http://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19651207_gaudium-et-spes_en.html [accessed 15 October 2015].

[121] Cathy Mabry McMullen 'The Signs of the Times: The State of the Question among Ecologists' in Tobias Winright (ed.) *Green Discipleship: Catholic Theological Ethics and the Environment* (Winona MN; Anselm Academic, 2011), pp. 19–36, at p. 21.

[122] Nairn, 'The Roman Catholic Social Tradition and the Question of Ecology', p. 29.

collectively—are called to live out our commitments in service 'to real people in the concrete circumstances of human history.'[123] As Nairn explains:

> By means of the language of the 'signs of the times' the constitution challenges the Church to see the deep connection between the actual events of the world, both good and bad, and the Word of God. Taking its prompting from the eighth chapter of St Paul's Letter to the Romans, the council summons all believers to see that the World is groaning as in the pangs of childbirth, awaiting its fulfillment in Christ […] most basically, the driving force behind such language was the belief that the Holy Spirit is speaking in the day-to-day events of people's lives. The human person is always a being in the world, and therefore history itself must be part of what it means to be human. Once history enters into Christian reflection, the faithful are invited to analyse the changes around them and see how they affect the human condition itself. The events of the World therefore have a major importance for the Church: the 'times' themselves are able to teach the Church.[124]

According to Vanhengel and Peters, to qualify as 'a sign of the times' as the phrase is used in Catholic social teaching, and to avoid trivialising the concept, a problem must be substantiated by an accumulation of facts pointing to the same conclusions and this must be widely acknowledged by the public.[125] For Cathy Mabry McMullen the current overall ecological crisis is an unequivocal example of such a sign:

> The current scientific consensus on the declining state of the environment satisfies the criteria spelled out by Vatican II concerning what constitutes a sign of the times. It is hard to overstate how completely the science of ecology has embraced human impact as the global 'environmental crisis.' This consensus is reflected in how thoroughly the academic study of ecology is shaped by the paradigm of studying the underlying mechanisms of the crisis and the desire to provide a scientific basis for mitigating human impacts on Earth's systems.[126]

As regards the climate crisis as one specific driver of current and future ecological degradation, I have sought to establish in the previous section of this chapter that there is a robust scientific case for the phenomenon of anthropogenic global warming and for seeking to avert ecological catastrophe through embarking on a global collaborative project of decommissioning carbon-intensive energy infrastructure and building sustainable alternatives. There is a very high degree of collective confidence in the scientific community that this case has been unequivocally established: the overwhelming majority—97% of climate scientists—now agree that the accumulation of greenhouse gases in the atmosphere as a result of human activities is causing global warming.[127] Whilst the existence of such a consensus is strictly speaking irrelevant to the truth or falsity of a

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[123] David J. O'Brien and Thomas A. Shannon 'Gaudium et spes: Pastoral Constitution on the Church in the Modern World, Second Vatican Council, 1965: Introduction' in O'Brien and Shannon (eds.) *Catholic Social Thought: The Documentary Heritage* (Maryknoll, NY: Orbis Books, 1992), p. 173.

[124] Nairn, 'The Roman Catholic Social Tradition and the Question of Ecology', p. 30.

[125] M. C. Vanhengel OP, and J. Peters OCD, 'Signs of the times', *Concilium* 25 (Mahwah, NJ: Paulist Press, 1967), p. 145; quoted in Cathy Mabry McMullen, 'The Signs of the Times', p. 21.

[126] Mabry McMullen, 'The Signs of the Times', p. 22.

[127] John Cook, Dana Nuccitelli, Sarah A. Green, Mark Richardson, Bärbel Winkler, Rob Painting, Robert Way, Peter Jacobs and Andrew Skuce, 'Quantifying the consensus on Anthropogenic Global Warming in the Scientific Literature', *Environmental Research Letters* 8.2 (15 May 2013). http://iopscience.iop.org/1748-9326/8/2/024024/article [accessed 16 October 2015].

scientific theory,[128] which is inferred from its capacity to account for observational data and predict future developments, it is a crucial argument in favour of categorising the climate crisis as constituting a sign of the times upon which Catholic moral theologians are called to reflect in the light of the truths of faith. The criteria for so categorising an issue, as we have seen, include both an accumulation of evidence and its public acknowledgement. It would seem that, in principle, the climate crisis meets these criteria.

The climate crisis as a 'sign of the times' in Catholic social teaching

Having established that anthropogenic global warming is an issue that ought in principle to be regarded as a 'sign of the times', it remains to establish that a conservative moral methodology as exemplified by Germain Grisez is adequate to the task of reflecting theologically on this issue. If, as I shall seek to demonstrate, existing Catholic social teaching specifically acknowledges the climate crisis as 'a sign of the times' this recognition endows our theological task with institutional legitimacy in addition to its theoretical justification on the basis of our scientific and socioeconomic understanding of the nature and gravity of the challenge, and it begs the question as to why a Grisez School analysis of the climate crisis is nowhere articulated in the literature, an intellectual lacuna this thesis seeks to address.

As Celia Deane-Drummond has shown, the Church's magisterium has concerned itself with ecology since the early days of the environmental movement, a fact that she suggests 'may come as something of a surprise' to her readers.[129] Likewise—and perhaps even more unexpectedly to those who are not familiar with Catholic social teaching on the environment—the climate crisis was specifically acknowledged by Pope John Paul II as early as 1987[130] and has been a major driver of calls by the late pope and his successor Benedict XVI for 'ecological conversion.'[131] Integrating this contemporary evidence with the Church's long-standing and consistent teaching on human responsibilities to the environment, the Church authorities have sought both to articulate an inherent Catholic environmentalism and to initiate efforts to express this in concrete programs and initiatives.[132]

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[128] As Lord Lawson correctly notes, 'scientific truth is not established by counting heads.' Nigel Lawson, *An Appeal to Reason: A Cool Look at Global Warming* (London; New York; Woodstock: Duckworth, 2008), p.5.

[129] Celia Deane-Drummond, 'Joining in the Dance: Catholic Social Teaching and Ecology', *New Blackfriars* 93. 1044 (March 2012), pp. 193–212 at p. 194. http://onlinelibrary.wiley.com/doi/10.1111/j.1741-2005.2011.01476.x/abstract [accessed 16 October 2015].

[130] John Paul II, 'A Modern Approach to the Protection of the Environment', Address to a study group of the Pontifical Academy of Sciences (6 November, 1987), 2 http://www.casinapioiv.va/content/dam/accademia/pdf/sv100.pdf [accessed 16 October 2015] p. 289.

[131] Jacaranda Turvey, 'Natural Law and Ecological Conversion' Poster Presentation, In the Currents of History: From Trent to the Future Conference, Trento, Italy, 24–27 July 2012, Catholic Theological Ethics in the World Church.

[132] For example, in the USA, the Bishops' Conference issued 'Global Climate Change: A Plea for Dialogue, Prudence and the Common Good' and set up the organisation Catholic Climate Covenant to facilitate lay Catholic action on climate justice advocacy and footprint reduction: USCCB, (2001) Global Climate Change: A Plea for Dialogue, Prudence and the Common Good; USCCB (14 November 1991) Renewing the Earth: An invitation to reflection and action on environment in light of Catholic social teaching. http://www.usccb.org/issues-and-action/human-life-and-dignity/environment/renewing-the-earth.cfm [accessed 16 October 2015]; Catholicclimatecovenant.org: http://catholicclimatecovenant.org/ [accessed 16 October 2015].

I shall discuss contemporary Church teaching on the environment in more detail in Chapter Three in which I review the ecotheology literature relevant to this project and defend its choice of methodology. My aim here is to demonstrate that a general problem of environmental irresponsibility and exploitation has long been acknowledged at the highest level in the Church. As I hope to show in this section, a progression towards formal recognition by the Church of the ecological crisis as one of the 'signs of the times' that Catholics should reflect upon and integrate into our understanding of our individual and collective calling is discernible within the official teachings of the magisterium, with the climate crisis explicitly recognised as such since at least the turn of the millennium. As Deane-Drummond notes, far from being an afterthought in Roman Catholic social teaching,[133] the awareness of the need for environmental responsibility has been there from the beginning of the emergence of ecotheology.[134]

In 1971, writing on the eightieth anniversary of Leo XIII's encyclical *Rerum novarum* (Rights and Duties of Capital and Labour)[135] Paul VI pointed out that 'by an ill-considered exploitation of nature [humankind] risks destroying it and becoming in his turn the victim of this degradation.' He alluded to problems of pollution, new diseases and 'absolute destructive capacity' concluding that 'the human framework is no longer under man's control, thus creating an environment for tomorrow which may well be intolerable. This is a wide-ranging social problem which concerns the whole human family.'[136] For John Paul II—writing in 1987—the rise of ecological concern was to be counted 'among the positive signs', in an age characterised by increasing inequality and loss of confidence in 'progress' and 'development' through industrialisation as a route out of poverty for the disadvantaged peoples of the world. He discerned a 'greater realization of the limits of available resources, and of the need to respect the integrity and the cycles of nature and to take them into account when planning for development, rather than sacrificing them to certain demagogic ideas about the latter.'[137]

In the United States, the Conference of Catholic Bishops (USCCB), in a statement entitled *Renewing the Earth*[138] published in 1991, clearly identified the ecological crisis as a 'sign of the times', and specifically mentioned global problems associated with 'greenhouse gases and chlorofluorocarbons'

[133] Deane-Drummond notes Zambian theologian Peter Henriot's argument for a broader definition of CST, to span the collective wisdom of the whole Catholic community, including the work of theologians and the witness of the lives of good Christians. Deane-Drummond herself limits her use of the phrase to the official social teaching of the Church, commenting that whilst it may be rooted in theology and biblical reflection, the essence of CST as she employs the term is that it emanates from the official hierarchical magisterium. I shall follow her example in so limiting the scope of CST. Deane-Drummond, Joining in the Dance, p. 194.

[134] Deane-Drummond, 'Joining in the Dance', p. 201.

[135] Leo XIII, *Rerum Novarum*, 15 May 1891. http://www.vatican.va/holy_father/leo_xiii/encyclicals/documents/hf_l-xiii_enc_15051891_rerum-novarum_en.html [accessed 16 October 2015].

[136] Paul VI, *Octogesima adveniens* (Apostolic letter of Paul VI), 14 May 1971, #21. http://www.vatican.va/holy_father/paul_vi/apost_letters/documents/hf_p-vi_apl_19710514_octogesima-adveniens_en.html [accessed 16 October 2015].

[137] John Paul II, *Solicitudo rei socialis*, 30 December 1987, #26 http://www.vatican.va/holy_father/john_paul_ii/encyclicals/documents/hf_jp-ii_enc_30121987_sollicitudo-rei-socialis_en.html [accessed 16 October 2015]

[138] USCCB, *Renewing the Earth.*

that 'affect the earth's atmosphere for many decades,[139] regardless of where they are produced or used.' At a conference organised by the Vatican's Council for Justice and Peace in 2007, Bishop Bernd Uhl of Freiburg, Germany spelled out the Church's recognition of the climate crisis to scientists, environment ministers and leaders of various religions from twenty countries who had gathered in Vatican City: 'Climate Change is one of the signs of the times affecting the Catholic Church as a global organisation. The Catholic Church must take a stand on this present day and urgent question.'[140] Benedict XVI, in his message for the 2010 World Day of Peace entitled 'If you want to cultivate peace, protect Creation', discerned 'signs of a growing crisis, which it would be irresponsible not to take seriously', listing climate change as one of these signs, in the face of which the Church cannot remain indifferent.[141] Although, as Christopher Vogt comments, Catholic social teaching 'is only beginning to integrate environmental ethics into its vision of a just society',[142] there are clear indications of a long-standing recognition of and concern over ecological problems and the climate crisis within the magisterium. Whilst a few politicians and economists continue to pour scorn on climate science and argue against action to mitigate global warming, there can be no doubt that for the Catholic Church, as for the scientific community, the accumulated evidence of anthropogenic climate forcing is unequivocal and greenhouse gas pollution has the status of a 'sign of the times' that Catholic theologians and lay-people are exhorted by the Church to reflect upon and integrate into their Christian faith and witness.

In *Renewing the Earth*, the US bishops specifically called upon biblical scholars, theologians and ethicists to 'help explore, deepen and advance the insights of our Catholic tradition and its relation to the environment' and especially 'the relationship between this tradition's emphasis upon the dignity of the human person and our responsibility to care for all God's creation'[143] For Schaefer, the role of Catholic theologians seeking to be faithful to this calling is to use 'our skills to identify, explain and demonstrate various theological perspectives from which to think about the human person in relation to one another and to other species, ecological systems and the biosphere of our planet that are imperilled now and will be imperilled into the future by our climate disruptive activities'.[144] To aid us in this endeavour, Schaefer notes, Catholic theologians 'have much upon which to draw when addressing the damage that humans are causing to one another, other species and our planetary home.'

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[139] Indeed the retention times for some greenhouse gases are of the order of thousands of years, see: Susan Soloman, Dahe Qin, Martin Manning, Melinda Marquis, Kristen Averyt, Melinda M. B. Tignor, Henry LeRoy Miller Jr. and Zhenlin Chen(eds.) Climate Change 2007, *The Physical Science Basis: Contribution of Working Group I to the Fourth Assessment Report of the International Panel on Climate Change* (Cambridge UK; New York: Cambridge University Press) p. 33.

[140] Philip Pullella, 'Religion Must Help Protect Planet: Conference' Reuters, 27 April 2007 http://www.reuters.com/article/idUSPAR75418020070430 [accessed 16 October 2015]; quoted in Schaefer, 'Introduction' in Schaefer (ed.) *Confronting the Climate Crisis*, pp. 9–36, at pp. 23–24.

[141] Benedict XVI 'If you want to cultivate peace, protect creation' Message for World Day of Peace 2010, reprinted in Winright (ed.) *Green Discipleship*, pp. 61–71, at p. 63.

[142] Christopher P. Vogt, 'Catholic Social Teaching and Creation' in Winright (ed.) *Green Discipleship*, pp. 220–241, at p. 239.

[143] USCCB Renewing the Earth; quoted in Schaefer, 'Introduction' in: Schaefer (ed.) *Confronting the Climate Crisis*, pp. 9–36, at p. 10.

[144] Schaefer, 'Introduction' in: Schaefer (ed.) *Confronting the Climate Crisis*, pp. 9–36, at p.25.

> The data upon which we can rely span the Bible (the primary texts of our tradition), teachings over the centuries by eminent theologians who are revered in the Catholic tradition, documents issued by the Church magisterium, a growing array of theological reflections informed by scientific findings and discussions of ethical imperatives pertaining to the natural environment. When read through an ecological lens, this rich combination of sources can be helpful and meaningful for addressing ecological degradation generally and human-forced climate change specifically.'[145]

Conclusion

To conclude: this chapter has laid the foundation of my thesis, arguing that climate change is a sign of the times with which Catholics need to engage theologically. Section One has demonstrated that robust evidence exists to substantiate the existence of anthropogenic global warming which—as we have seen in Section Two—constitutes a global ecological emergency requiring the reconstruction of our energy infrastructure, giving rise to the need to draw on all the resources of our worldviews and value-systems to describe and address this challenge. As Section Three has shown, the magnitude of the challenge and the huge expected consequences of collective failure to address it strongly suggest that the climate crisis meets the criteria for recognition by the Church as a 'sign of the times'. Furthermore, documentary evidence of its longstanding official acceptance as such within Roman Catholic social teaching suggests that the methodological approach adopted in this project can make an important contribution to Catholic ecotheology. Having made this argument we can now proceed to the main theological work of the thesis. My next chapter argues that Grisez's methodology closely tracks the likely trajectory of future Catholic social teaching on the environment, such that his thought on ecological issues—the subject of Chapter Four—provides useful insight into likely future doctrinal developments.

[145] Jame Schaefer 'Environmental Degradation, Social Sin and the Common Good' in Miller, Richard W. (ed.), *God, Creation and Climate Change: A Catholic Response to Climate Change,* (Maryknoll, New York: Orbis Books, 2010) pp. 69–94 at pp. 69–70; see also Jame Schaefer, *Theological Foundations for Environmental Ethics: Reconstructing Patristic and Medieval Concepts* (Washington DC: Georgetown University Press, 2009).

Chapter 3: The Greening of the Papacy?

Introduction

Aims

This thesis proposes a recovery of Germain Grisez's orthodox Catholic environmental ethics and shows how applying his dialectical method to the climate crisis as a sign of the times allows us to extend his thought to the novel and pressing ethical questions of the Anthropocene. This chapter contributes to the larger aims of the project a defence of its choice of methodology and an attempt to contextualise this approach to the ecological crisis, both within the broader field of ecotheology and in relation to current Catholic social teaching on ecological questions.

Argument

The argument of this chapter is that the dialectical method in moral theology espoused by Germain Grisez, in which faith seeks understanding, can be a fruitful approach to reflection on the ecological crisis and to the formulation of strategies to address it that are appropriate within the Roman Catholic context.

I shall argue on the one hand that scholars who construe ecotheology as a threat to Catholic orthodoxy direct their critiques against a straw man: whilst some individual ecotheologians have proposed theologically radical approaches, others have sought to construct an environmental ethics from within the tradition. As we shall see in Chapter Four, Germain Grisez provides an exemplar of this approach. Furthermore, one cannot consistently object to the dissenting views of radical ecotheologians whilst overlooking the authoritative teaching of the Church on ecological questions including the climate crisis.

On the other hand, I shall argue that the frustration of some prominent ecotheologians with what they see as ecologically damaging anthropocentrism in current Catholic social teaching is in fact unwarranted. The Vatican position, if it can be said to be anthropocentric, is sufficiently nuanced to support extensive ecological values and principles. The primary problem that theologians need to address, I shall argue, is not the ecological inadequacy of Papal thought so much as a collective failure by the Catholic community to translate existing doctrine into strategies and initiatives to enable Catholics to live consistently with Church teaching on the environment.

For these reasons, this thesis proposes the adoption of a dialectical methodology, reflecting on our environmental challenges from with the living truths of faith, in search of authentic Catholic responses to the ecological crisis which—in Chapter Two—we have established as a scientific reality and a 'sign of the times'. Having thus established the gap in the literature that a Grisez School perspective on the ecological crisis is required to fill, we will be in a position to proceed to an examination of Germain Grisez's environmental ethics—the fruit of his conscientious application of this methodology—to propose a rereading of his integral humanism in the light of this research and to suggest how we might extend his insights and approach to the climate crisis: this will be the task of Chapter Four.

Grisez's Methodology

Germain Grisez defines theology as 'talk about God and about everything else insofar as it is related to God.' Positive theology reflects on the authoritative sources of the tradition in order to better

understand the truths of faith, whilst systematic theology comprises contemplative theology which reflects on truth from other disciplines in the light of the truths of faith to achieve a larger synthesis, and moral theology which seeks to establish how a person of faith should live in response to salvation. For Grisez, theology is always subordinate and never superior to the normative expressions of the Church's faith. He holds to the inerrancy of Holy Scripture[146] and the infallibility of the teaching office of the Church as heir to the apostolic tradition.[147]

The methodology Grisez adopts and espouses in moral theology he describes as 'dialectical'. He defines 'dialectic' in the sense in which he employs the term as:

A method of enquiry, distinct from the scientific method—in either the Aristotelian sense, the rationalist sense or the modern, empirical sense. Dialectic proceeds by revising the propositions one thinks true in the light of the whole set of truths one accepts. This is the appropriate method for theology; but here, unlike other forms of dialectic, the truths of faith are taken as fixed and unrevisable.[148]

For Grisez it is characteristic of Catholic theologians to think with the Church, to conform their judgements to the doctrine of faith and to treat as erroneous every opinion which the Church condemns as such.[149] The Grisez scholar's task is to seek moral truth without compromising either fidelity to the Church or his or her own intellectual integrity.

As Grisez describes it, the historical backdrop against which the Second Vatican Council called for renewal in moral theology was one in which the discipline had been infected with a spirit of rationalism, becoming too legalistic, and the balance between our human nature and our spiritual reality as adoptive children of God had been lost. In his view, contemporary moral theology has tended to over-react against the other-worldly tendencies in classical moral theology, resulting in an over-emphasis on the temporal at the expense of the eternal. Since his aim is to correct this and restore the balance between nature and grace, it seems unlikely that he would commend ecotheologies, such as that proposed by Sallie McFague, that call for more emphasis on the embodied and the immanent dimension of faith.[150] Yet as I shall show in my next chapter, Grisez does not reject ecotheology as such; he carefully sifts through the Church's teaching on the subject and seeks to construct an environmental ethics in the light of the received truths of his faith.

Germain Grisez likens contemporary moral theology to a construction site, in which the building is only partly completed, while within there is an accumulation of material for use in the structure, as theologians step up to the task set by the Second Vatican Council.[151] He agrees with Josef Fuchs that

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[146] Grisez, *Christian Moral Principles*, Chapter 35, Question B (3) p. 836.

[147] 'Christian faith is not individualistic. Each believer enters into the faith of the Church: the apostolic, collegial grasp upon God's revelation in Jesus. Hence the Church as a whole enjoys the prerogative of the apostolic faith in which it shares: infallibility. Unity with the apostles makes it possible for the Church to continue to carry out Jesus's mission through all generations.' Grisez, *Christian Moral Principles*, Chapter 35, Question A (12) p. 833.

[148] Grisez, *Christian Moral Principles*, Index: Some key words, p. 919.

[149] Grisez, *Christian Moral Principles*, Chapter 1, Question C (4), p. 9.

[150] Sallie McFague, *A New Climate for Theology* (Minneapolis: Fortress Press, 2008).

[151] Grisez, *Christian Moral Principles*, p. 24. n. 35; quoting The Sacred Congregation for Catholic Education, *The Theological Formation of Future Priests* (Washington DC: United States Catholic Conference, 1976) section 69.

'no real tradition of the ideal moral theology contemplated by the Council exists today'[152] and offers his project '*The Way of the Lord Jesus*' in response to the recommendation of the Congregation for Catholic Education that up-to-date text books be provided to equip scholars and seminarians with the tools to further this constructive task.[153]

The congregation cautions against various fashionable theologies, which are 'one-sided, partial and sometimes unfounded' and that inevitably arise and gain ground in this chaotic and fragmentary state of moral theology, in which order and completeness are lacking and the central truths of faith are easily lost to sight.[154] Faced with an ecological crisis with the potential to overwhelm the capacity of our civilisation to adapt, there is a temptation to construct makeshift theologies rather than playing our small part in the painstaking project of renewal that is required. This thesis suggests that the ecological crisis is driven by the moral and spiritual crises of our times and we will need to bring back to full consciousness the founding values of Christendom in order to face up to the ecological challenge. Grisez's methodology of 'thinking with the Church' is profoundly attractive as a means to intellectual penetration of Catholic tradition; for this reason I have chosen to centre this project on the recovery of Grisez's environmentalism and its application to the climate challenge. It is clear from the paucity of literature on Grisez School ecology that this project addresses an important intellectual lacuna. This chapter seeks to contextualise the thesis within the diverse field of Catholic ecotheology, taking forward my overall argument for a recovery of Grisez's environmentalism and application of his thought and his methodology to our ecological challenges.

Section One: Critiques of Radical Green Spirituality

The aim of this section is to examine some critiques of 'radical green spirituality' in order to demonstrate that the core objectives of environmentalism are fully compatible with Roman Catholic theological and moral orthodoxy.

This section argues that scholars who construe ecotheology as a threat to Catholic faith and moral teaching paint a diverse field with a single brush: whilst some individual ecotheologians have proposed theologically radical approaches, others have sought to construct an environmental ethics from within the tradition. Furthermore, for consistency, conservative Catholic scholars who object to the dissenting views of radical theologians need to engage with the Church's teaching on ecological questions including the climate crisis.

How is ecotheology seen as a threat to orthodoxy?

Introduction

The alleged anthropocentrism of the Christian tradition is seen by many scholars as an impediment to ecological inclusivity but their calls for the Vatican to move beyond this human-centeredness are resisted by conservative theologians. As Donal Dorr notes, there are two interrelated objections to the adoption of a 'geocentric' position: firstly a concern that it denies or plays down the transcendence of God and secondly a concern that it denies the uniqueness of the human person. The former threatens the content of faith by calling into question the nature of God, whilst the latter

[152] Grisez, *Christian Moral Principles*, p. 36, n. 20; in which Grisez commends Josef Fuchs S.J. *Human Values and Christian Morality* (Dublin, Gill and Macmillan, 1970) pp. 1–55.

[153] Grisez, *Christian Moral Principles*, Chapter 1, Appendix 2, p. 24.

[154] Grisez, *Christian Moral Principles*, Chapter 1, Appendix 2, p. 24.

deconstructs traditional theological ethics built on the central concept of inalienable human dignity. Dorr himself advocates a 'theological conversion' corresponding to the 'ecological conversion' called for by Pope John Paul II: a rethinking of Catholic social teaching in the light of an ecological paradigm.[155] In an article[156] discussing early indications of a significant shift in emphasis towards ecology since the election of Pope Francis to the chair of St Peter, Dorr agrees with Paul Vallely[157] that on environmental issues the new pontiff 'looks set to move the Church on to a more radical political agenda.' His frustration with the intractable anthropocentrism of Vatican teaching under Benedict XVI is clear:

> My major regret about the teaching of Pope Benedict on the issue of ecology is that he, who is so committed on environmental issues, did not locate everything he had to say about human responsibility and business activity in this time of economic crisis within the broader context of the ecological crisis of our time. His teaching emerges from an older anthropocentric paradigm where ecological issues are related almost entirely in terms of present-day human concerns. What is needed today however is a kind of Copernican revolution leading to a major paradigm shift. We need to locate all our human concerns—and especially our approach to economics—within the far wider context of an ecological and cosmic vision. Nothing would be lost and much would be gained if what the Pope has written in Caritas in veritate and elsewhere about economics and ecology were framed within this wider vision.[158]

In section two of this chapter we will examine the question of whether Catholic social teaching is accurately characterised as anthropocentric and to what extent this is problematic for Catholic ecological engagement. Before turning to this question, let us examine the two concerns Dorr identifies as crucial determinants of papal reluctance to 'take the small extra step of moving from a nuanced anthropocentric approach to one that is more geocentric': the alleged twin threats of pantheism and diminishment of human dignity.

Is Ecotheology Pantheistic?

The case for the prosecution

In articulating the Church's position on the status of nature, it is clear that the Vatican is concerned to chart a course between the Scylla of pantheism and the Charybdis of exploitative materialism. In Caritas in Veritate, Benedict XVI stresses that:

> It is contrary to authentic development to view nature as something more important than the human person. This position leads to attitudes of neo-paganism or a new pantheism—human salvation cannot come from nature alone, understood in a purely naturalistic sense. This having been said, it is also necessary to reject the opposite position, which aims at total technical domination over nature, because the natural environment is more than raw material to be manipulated at our pleasure.[159]

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[155] Donal Dorr, *Option for the Poor and for the Earth: Catholic Social Teaching,* (Maryknoll, New York: Orbis Books 2012), p. 431. [accessed 19 October 2015].

[156] Donal Dorr, 'The fragile world: Church teaching on ecology before and by Pope Francis' *Thinking Faith*, 26 February 2014. http://www.thinkingfaith.org/articles/20140226_1.htm [accessed 19 October 2015].

[157] Paul Vallely. 'Pope Francis: Possibly Liberal, maybe a conservative but definitely radical' *The Irish Times*, 4 February 2014. http://www.irishtimes.com/news/social-affairs/religion-and-beliefs/pope-francis-possibly-liberal-maybe-a-conservative-but-definitely-radical-1.1677981#.UvEk77Ck3Fo.twitter [accessed 19 October 2015].

[158] Dorr, *Option for the Poor and for the Earth*, p. 431.

[159] Benedict XVI, *Caritas in Veritate*, 29 June, 2009, #48.

Germain Grisez suggests that the experience of awe and wonder aroused by the beauty and order of nature can lead to nature worship amongst those who deny or are forgetful of the creator God. Problematic ideologies and policies he sees as attributable to this theological error include the desire to preserve pristine 'sacred' tracts of nature from any human development, radical proposals to limit or reduce human population and a failure to take into account the burdens of environmental policies on the working poor.[160]

For Robert Whelan the essential question for Christians concerning Green values and practices is: how compatible are they with orthodox Christian teaching? He detects in some rather bizarre examples of US environmental policy (such as the rule that only man-made fires should be extinguished in Yellowstone park 'in the interests of returning the park's ecology, as much as possible, to its natural state') a 'modern variant on Manichaeism which sees everything man-made as evil and everything natural as good.' Whelan quotes passages from Lynn White's argument that Judeo-Christian anthropocentrism is responsible for the exploitation and destruction of nature, concluding that:

> On almost every key point he was absolutely right. Christianity affords man [sic] a uniquely exalted position amongst the world's religions. Not only is man made in the image and likeness of God, but God sent his only son to redeem us from sin and win us for eternal life. This has not been vouchsafed to any animal or plant species. Furthermore, Christianity has always been implacably opposed to all forms of animism and pantheism which characterised other ancient religions. For the Christian, there is certainly no need to ask permission of rivers to dam them or of mountains to mine them.[161]

Whelan of course disagrees with White's central aim: the point of White's thesis—that the main impediment to the progress of environmental awareness in post-Christian Western cultures is the still pervasive Christian attitude towards the techno-scientific exploitation of nature—is to propose a reconstruction of Christian theology. For White: 'more science and more technology are not going to get us out of the present ecological crisis until we find a new religion or rethink our old one.'[162] Whelan is using White's argument to critique the theological radicalism he sees in the historical roots of the environmental movement:

> As Stephen Fox has shown in his history of environmentalism, White is only making public a strong anti-Christian bias, which had existed in the environmentalist movement since its earliest days in the previous century. Fox shows that John Muir, who later founded the Sierra Club, Ralph Waldo Emerson and Henry David Thoreau, who were all seminal figures in the development of environmentalism in North America, shared a strong pantheistic faith.[163]

Whelan attributes the rise in New Age pantheistic environmentalism to a decline in support for Christianity leading to a search for some other deity to fulfil the basic human need to worship or at least to have 'something to believe in.'[164] Although he concedes that to present the whole of the

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[160] Germain Grisez, *Living a Christian Life*, p. 773.

[161] Robert Whelan, 'Greens and God', in: Robert Whelan, Joseph Kirwan and Paul Haffner, *The Cross and the Rain Forest: A Critique of Radical Green Spirituality*, (Grand Rapids, Michigan: William B. Eerdmans, 1996) , pp. 7–56, at pp. 16–18.

[162] White, Lynn, 'Historical Roots of our Ecological Crisis', *Science* 155 (1967), 1203–7.

[163] Whelan, 'Greens and God', p. 21 n. 38

[164] Whelan, 'Greens and God', p. 23.

Green movement as the political wing of New Age ideology would be a 'gross oversimplification' he nevertheless argues that:

> It is only against the background of the New Age mysticism which informs the environmental movement that we can understand the motivation for the campaigns. Many of the goals which are being pursued in the name of the environment will not only curtail economic growth, but would also represent ever tightening restrictions on the liberty of the individual. Some of the most important are, at best, unnecessary and at worst a real threat to human well-being, such as energy taxes and laws which favour destructive animals and even vermin over human beings under the guise of preserving endangered species. To get people into the frame of mind to take such unpleasant medicine a formidable threat is required: everything hinges on the prospect of imminent ecological collapse.[165]

On Whelan's analysis, the environmental crisis—and especially the phenomenon of global warming—is not backed by compelling scientific evidence. He suggests that underlying anti-Christian religious heresy and ideological commitment to political outcomes such as 'one world government, a single currency, universal taxation, the redistribution of wealth through a New World economic order and the allocation of food and other resources through global agencies'[166] as well as a 'halt to economic growth, an end of market economies and industrial development and an abandoning of the notion of 'progress' understood as improving the quality of life for human beings'[167] are the real drivers behind the environmental movement, with the myth of impending ecological collapse a mere pretext for the pursuit of these political goals. He further asserts that:

> Fear of an environmental crisis has been used to introduce into Christian churches forms of worship which the Bible condemns, including the worship of other gods and liturgies celebrating inanimate nature. The acceptance of New Age teaching and rituals by many who describe themselves as Christians, and even by ministers of the Gospel, is also often due to concern for the environment.[168]

Whelan insists that he is not arguing that Christians should not be concerned about the state of the environment. He argues that everything in the universe is God's good creation, that we can learn to know God through the beauty and wonder of creation, and that we 'can in some measure respond to his love for us by caring for it.' For Whelan, the Christian approach to environmental problems must be based on the insights of the Christian faith, and must not mimic or repeat attitudes and beliefs which clearly come from a different spiritual perspective. But—in quoting with approval the view of Presbyterian pastor Peter Leithart—he seems to conclude that human sin is related only indirectly to environmental devastation, which is brought about by a wrathful God in response to idolatry, sexual immorality and other neopagan practices that have been allowed to pollute the sanctuary of Christian worship.[169]

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[165] Whelan, 'Greens and God', p. 26.

[166] Whelan, 'Greens and God', p. 25.

[167] Whelan, 'Greens and God', p. 9.

[168] Whelan, 'Greens and God', p. 50.

[169] Peter J. Leithart, 'Snakes in the Garden: Sanctuaries, Sanctuary Pollution and the Global Environment' in: *Proceedings from the Seminar on Ecology and Religion*, April 30–May 1 1993, Washington: Competitive Enterprise Institute, p. 67.

The Defence

Ecotheologians should concede the undeniable fact that there are pantheistic and Manichean elements within the environmental movement; Grisez correctly identifies environmental policy outcomes incompatible with Catholic social teaching that may be a direct result of constructing nature as sacred and all human intrusion as wrong and ecologically injurious. Whelan, however, begins with the assertion that the ecological crisis is a myth and goes on to suggest—without citing evidence to substantiate this claim—that environmental scare stories have been fabricated as a pretext for the pursuit of a 'Liberal' political agenda he rejects. His purpose in documenting pantheistic and neopagan strands in the thought of leading environmentalists—from John Muir and Ralph Waldo Emerson to Al Gore and Bill McKibben—appears to be the construction of a 'straw man'—a caricature of 'environmentalism' that he seeks to discredit not through persuasive philosophical argument but through rhetorical moves intended to associate the Green movement with heresy and left-wing politics and Nazi ideology.[170] On his own account he has 'attempted to set out some of the reasons for which Christians might want to give the Green movement a wide berth', yet if ordinary environmentalists are really the lost souls—misled by deceitful leaders into living in groundless fear of ecological collapse and desperately searching for something to believe in—that Whelan imagines, surely the Christian response should be to attempt to share 'the hope that is in us' and 'the love that drives out fear' with these people? In fact, as we shall see in the next section, Whelan is inconsistent on this point: in the conclusion to his essay on Green anti-humanism he declares:

> It is right that Christians should concern themselves with environmental problems. Making the physical world a better place to live in is one of the ways in which we can be the salt of the earth. However Christians are now being called upon to exercise a special ministry to the environmental movement, and that is to inject into it the values and priorities of the Bible.[171]

Whelan's worldview is at once politically and theologically conservative, but he does not distinguish between 'the values and priorities of the Bible' and the values and objectives of political conservativism, and hence does not seem to recognise the possibility that—under the broad banner of the environmental movement—individuals and groups might exist who share his orthodox Christianity but do not share his political loyalties, or even a species of environmentalist that shares both his theological and his political worldview, but is rationally persuaded by the scientific case for anthropogenic global warming and the pressing imperative of greenhouse gas abatement action. Yet examples of such individuals abound: Margaret Thatcher—who shared Whelan's political commitment to free market Capitalism and economic growth and his scepticism of 'big government' solutions to environmental problems and resource distribution yet understood anthropogenic global warming as a real problem that we have a duty to address—being the most obvious example. This phenomenon may be more common in Europe than in the US,[172] but even across the pond Mother Nature Network is able to identify seven leading Republicans who 'get climate change', beginning

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[170] Whelan, 'Greens and God', pp. 7–8.

[171] Robert Whelan, 'Greens and People', in: Whelan, Kirwan and Haffner, *The Cross and the Rain Forest*, pp. 57–101, at p. 94.

[172] Rod Dreher, 'Why do Conservatives Hate Environmentalism? *The American Conservative*, 14 March 2014, http://www.theamericanconservative.com/dreher/why-do-conservatives-hate-environmentalism/?utm_source=rss&utm_medium=rss&utm_campaign=why-do-conservatives-hate-environmentalism [accessed 19 October 2015].

with California Governor Arnold Schwarzenegger.[173] Rod Dreher calls such individuals 'Crunchy Cons'.[174] Roger Scruton's carefully argued philosophical treatment of environmental issues, *Green Philosophy*, argues that conservativism is better suited to tackling environmental problems than either socialism or liberalism. On his view:

> The likelihood of global warming does not serve to lift environmental problems out of the spheres where the conservativism that I advocate gains a foothold: the spheres of inherited affections, national sovereignty, free enterprise and civic initiatives. Let us assume that it is true that man-made [sic] greenhouse gases pose a near and present danger to humanity, by threatening to create conditions to which we cannot adapt. Then we must learn to live in another way, so as to produce less gas; failing that we must follow the path of geo-engineering, and look for ways to counteract our emissions by cooling the planet, meanwhile striving to adapt to whatever change is unavoidable. The first of these ways involves sacrifice; the second involves research and determination, and a large element of risk […] either way, change, adaptation and remedial efforts will be the work of self-identifying nation states, and in particular of those nation states in which public spirit, enterprise and economic activity are all strong enough to bear a burden that might be at least as great as that involved in fighting a defensive war.[175]

To sum up: Whelan's critique of radical green spirituality, whilst it correctly identifies pantheistic tendencies in the writings of some of the founding fathers of American environmentalism an in the rhetoric of some prominent figures in ecotheology and in the environmental movement today, does not establish either that the movement as a whole is anti-Christian or that its rank and file have been misled by—or are in collusion with—leaders who have fabricated the idea of an ecological crisis as pretext for a left-wing policy agenda. Whelan does not engage seriously with the arguments of conservative Christian environmentalists, and the two papers he contributes to *The Cross and the Rainforest* contribute more to the unnecessary polarisation of debate than to the enterprise of authentic Christian ecotheology.

Returning to Donal Dorr's response to Vatican concerns about the divination of nature that 'can readily be seen in certain ecological movements'[176] with which we opened this section: Dorr complains that 'it is unfair to assume that ecotheologians agree with those who divinise nature or adopt a pantheistic position.'[177] However this seems to go too far in the opposite direction: whilst it may be unfair to assume this of all ecotheologians, there undoubtedly are numerous examples of scholars working in this field who have embraced the divination of Gaia,[178] advocated neopagan

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[173] Shea Gunther, '7 Republicans who really get climate change' Mother Nature Network, 18 January, 2010, http://www.mnn.com/earth-matters/climate-weather/photos/7-republicans-who-really-get-climate-change/california-gov-arno [accessed 19 October 2015].

[174] Rod Dreher, *Crunchy Cons* (New York: Crown Forum, 2006).

[175] Roger Scruton, *Green Philosophy: How to Think Seriously About the Planet* (London: Atlantic Books, 2012), pp. 67–68.

[176] Dorr, *Option for the Poor and the Earth*, p.435.

[177] Dorr, *Option for the Poor and the Earth*, p.435.

[178] Celia Deane-Drummond gives as examples Charlene Spretnak, who uses the language of Gaia to describe the earth as a Goddess and Anne Primavesi for whom, as Deane-Drummond reads her, there is an implied connection between God and Gaian Goddess. Celia Deane-Drummond, *Ecotheology*, (London: Darton, Longman and Todd, 2008) pp. 156–157; quoting Charlene Spretnak, *States of Grace: The Recovery of Meaning in a Post-Modern Age* (New York; Harper Collins, 1993, 1st Edition 1991), pp. 135–136; Anne Primavesi, *Sacred Gaia: Holistic Theology and Earth System Science* (London; Routledge, 2000).

animism[179] or broadened the scope of the incarnation's significance to the point of blurring the distinction between God and creation.[180] On the other hand, as Dorr points out, there are deeply committed ecotheologians like Denis Edwards—who argues in favour of a 'biblical theocentric vision'[181]—and John Feehan, who grounds his concept of ethical kinship and consanguinity between all God's creatures in Thomas Aquinas's argument that nature is not intended primarily for us, but was created for God's own pleasure.[182]

So, on the question of whether ecotheology is necessarily a threat to Christian orthodoxy, I would conclude that it is not: whilst the field has historically been tolerant of radical, feminist and revisionist ecotheologies and inclusive of perspectives from other faiths including pagan and pantheist contributions, this has been in a spirit of working together with other people of faith and goodwill to address a complex global problem, as Catholics are mandated to do. The tasks of articulating an ecotheology that takes global warming seriously, from within the lived authenticity of Catholic—and of course also Protestant—traditional theologies is ongoing and involves numerous scholars around the world. It is my hope that this thesis will contribute a 'Grisez School' ecotheology to this larger endeavour. The task of Section Two of this chapter is to situate this project within the field of Catholic ecotheology—establishing the novelty of the approach adopted in this thesis. Before we turn to this task, however, we need to address the second nexus of concerns Dorr identifies as possible threats to Catholic orthodoxy associated with ecotheology: Is the rejection of anthropocentrism necessary to an adequate and effective environmental ethics and what impact would this proposed elimination 'of the ontological and axiological difference between men [sic] and other living beings' have on legal and theological concepts like inalienable human rights and the dignity of the human person as *imago Dei*?

Does Biocentrism threaten the ascription of dignity to the human person?

According to the Compendium of the Social Doctrine of the Church:

> The Magisterium finds the motivation for its opposition to a concept of the environment based on ecocentrism and on biocentrism in the fact that 'it is being proposed that the ontological and axiological difference between men and other living things be eliminated, since the biosphere is considered a

[179] Mark Wallace purports to rediscover the pagan roots of Christianity, taking—as Celia Deane-Drummond puts it—a 'bold turning towards uncharted territory'. See Deane-Drummond, *Ecotheology*, pp. 134–138; quoting Mark Wallace, *Fragments of the Spirit: Nature, Violence and the Renewal of Creation* (Harrisburg; Trinity Press International, 2002). See also Mark Wallace, *Finding God in the Singing River*, (Minneapolis; Fortress Press, 2005); and Mark Wallace, *Green Christianity: Five Ways to a Sustainable Future* (Minneapolis; Fortress Press, 2010).

[180] Celia Deane-Drummond is critical of this tendency which she sees in the work of Sallie McFague: Deane-Drummond, *Ecotheology*, pp. 212–213, n. 5, quoting Sallie McFague, *The Body of God: An Ecological Theology* (Minneapolis; Fortress Press, 1993).

[181] Denis Edwards, *Ecology at the Heart of Faith: The Change of Heart that leads to a New Way of Living on Earth* (Maryknoll, NY: Orbis Books, 2006); quoted in Dorr, *Option for the Poor and for the Earth*, p. 433.

[182] John Feehan, *The Singing Heart of the World: Creation, Evolution and Faith* (Dublin; Columba Press and Maryknoll, NY: Orbis Books, 2012); quoted in Dorr, *Option for the Poor and for the Earth*, p. 433.

> biotic unity of undifferentiated value. Thus man's superior responsibility can be eliminated in favour of an egalitarian consideration of the 'dignity' of all living beings.'[183]

Germain Grisez argues that human rights depend entirely on the theological assertion of unique 'human dignity', and he takes the view that ascription of rights to animals threatens the traditional respect for the sanctity of human life enshrined in Catholic social teaching which is implacably opposed to the social trend towards permissive legislation on issues such as abortion, euthanasia and assisted suicide. It is worth looking at his argument in full, as it throws light on some of the reasons behind the Vatican reluctance to jettison anthropocentricism altogether that Dorr and other ecotheologians favouring a paradigm shift to biocentric ethics find so frustrating:

> Some philosophers argue that animals have rights just as people do. As it is most commonly explained, the position is that humans have rights because they have interests which others' actions can fulfil (leading to satisfaction) or frustrate (leading to pain); but animals in various degrees—higher animals more, lower ones less—also have interests whose fulfilment or frustration causes them pleasure or pain; so, animals too have rights. Ascribing rights to animals leads directly to showing them deference even to the detriment of humans, for instance, some proponents of animal rights have interfered with the use of animals in medical and pharmaceutical research. Perhaps even more important, the theory of rights presupposed by most animal rights proponents implies that, while any mature and normal mammal has some rights, unborn and newborn human individuals have none whatsoever. Since the theory of animal rights has such implications, it is useful to explain why animals have no rights.[184]

Grisez goes on to argue that proponents of animal rights reject the Christian view of persons and cannot account for moral obligation. On his view, a sound account of moral obligation excludes animal rights, although this account—as I shall show in chapter four of this thesis—is entirely compatible, for Grisez, with the assertion of human duties to refrain from cruelty to animals and even to treat them with positive kindness and to respect their inherent value as God's good creatures. My purpose here however is to examine the question as to whether, if the Vatican were to take the 'short step' Dorr and others advocate—from a nuanced anthropocentrism to affirmation of inherent value in nature—this would, as many writers including Grisez have argued, involve the simultaneous jeopardising of central tenets of the traditional sanctity of life position? Is anthropocentrism an essential ingredient of an authentic Catholic pro-life ethics?

As we shall see in Section Two of this chapter, there is actually some interesting dispute between contemporary Catholic scholars as to whether or not CST is appropriately characterised as anthropocentric and whether—if it is—this has the implications for applied ethics that ecotheologians calling for a 'Copernican revolution' towards an earth-centred moral theology suppose. In chapter four I shall argue that Grisez's own environmental ethics is a very long way from being 'anthropocentric' in the pernicious, destructive sense attributed to our Judeo-Christian heritage generally by Lynn White and others. The debate seems to me to be much more subtle than most scholars appreciate: the choice is not simply between a destructive anthropocentrism and an anti-humanist biocentrism. Other intermediate positions are possible: anthropocentric ethics may be more or less nuanced and ecocentric positions more or less pro-life and respectful of human dignity.

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[183] Pontifical Council for Justice and Peace, *Compendium of the Social Doctrine of the Church* (Washington, D.C.: Libreria Editrice Vaticana, 2004) #463, p. 234; quoting John Paul II, *Address to participants in a convention on 'The Environment and Health'*, March 24, 1997.

[184] Grisez, *Living a Christian Life*, p. 783.

This thesis argues for a Catholic 'ecological humanism' as a possibility for the development of CST in the future, based on my analysis of Grisez's environmental ethics which—on my reading—goes beyond the current Vatican position but is wholly compatible with other strands of the traditional teaching.

However, returning to the task at hand, since it is clear that the impact of ecocentric ethics on the rights of vulnerable human persons is central to Grisez's rejection of the possibility of 'animal rights', it is worth examining his argument to see whether in fact a position respectful of both human and animal rights might be compatible with Catholic teaching. An example of one attempt to bridge this divide is the work of contemporary Catholic moral theologian Charles Camosy who advocates what he calls a 'consistent pro-life ethics.' Camosy is open to the idea of animal rights and argues for the inclusion of animals within the circle of beings to which we owe moral consideration as a matter of justice (which is not quite the same thing, as we shall see).[185]

Donal Dorr sums up Vatican objections to 'ecological egalitarianism' and animal rights activism:

> There is no doubt that there are some who have adopted an extreme position. Outraged about "factory farming," overfishing, irresponsible genetic modification of animals and plants, and other instances of human exploitation of other species, they adopt a position of "ecological egalitarianism" and maintain that other species have just the same rights as human beings. Indeed some of them seem, at times, to be more concerned about cats or dogs or lions than about humans. In insisting on the priority of "human ecology," John Paul and Benedict are reacting against this view that would reject or play down the distinctiveness of humans, claiming that the "rights" of animals and plants are equal to those of humans—if not in fact superior to them.[186]

Robert Whelan reports a string of anti-human comments from proponents of animal rights, from Oscar Wilde's satirical comment that 'those who live on lentils and artichokes are always calling for the gore of the aristocracy and for the severed heads of Kings'[187] to Ingrid Newkirk of PeTA who declares: 'Animal liberationists do not separate out the human animal, so there is no rational basis for saying that a human being has special rights […] I don't believe that human beings have "the right to life" […] this "right to human life" I believe is another perversion'[188] and the truly appalling view expressed by Dave Foreman of 'Earth First!' on famine relief work in Africa, that: 'The worst thing we

[185] Charles Camosy, *For Love of Animals: Christian Ethics, Consistent Action*, (Franciscan Media: Cincinnati, 2013).

[186] Dorr, *Option for the Poor and for the Earth*, p. 434.

[187] 'However, even vegetarianism in your hands, would make a capital article—its connection with philosophy is very curious—dating from the earliest Greek days, and taken by the Greeks from the East—and so is its connection with modern socialism, atheism, nihilism, anarchy and other political creeds. It is strange that the most violent republicans I know are all vegetarians: Brussels sprouts seem to make people bloodthirsty, and those who live on lentils and artichokes are always calling for the gore of the aristocracy and for the severed heads of kings. Your vegetarianism has given you a wise apathy—so at least you told me once—but in the political sphere a diet of green beans seems dangerous.' Oscar Wilde, *Letter to Violet Fane,* reprinted in: Merlin Holland (ed.) *Oscar Wilde: Letters and Essays* (London: The Folio Society, 1993); quoted in Whelan 'Greens and people' p. 72, n. 49.

[188] Ingrid Newkirk; quoted in Whelan, 'Greens and People', p. 75 n. 59.

could do in Ethiopia is to give aid—the best thing would be to just let nature seek its own balance, to let the people there just starve.'[189]

It is possible that a number of different factors influence the undeniable phenomenon of anti-humanist elements in the environmental movement. One factor seems to be the attribution of ecological degradation not to human sin but to human existence, or at least—it is argued—to our unsustainable population explosion. This leads to the kind of rhetoric in which human beings are categorised as a 'plague' or a 'cancer' in relation to a healthy ecosystem. Another factor that might be operative is that animal rights activists, having read and agreed with Peter Singer's *Animal Liberation*, sometimes go on to read his work on medical ethics and—especially if they have already rejected the religious worldview of their upbringing or have no personal experience of religion that commands their loyalty—find his philosophical arguments in favour of abortion, euthanasia and assisted suicide persuasive. Certainly Singer's work has been immensely influential and widely read by the general public as well as by students of philosophy. In addition to his well-known defence of animal liberation (contrary to popular perception he does not in fact himself argue for 'animal rights') Singer sees himself as leading a moral revolution, clearing away the last irrational vestiges of our essentially religious 'sanctity of life' ethic:

> The patching could go on, but it is hard to see a long and beneficial future for an ethic as paradoxical, incoherent and dependent on pretence as our conventional sanctity of life ethic has become […] it is time for another Copernican revolution. It will be, once again, a revolution against a set of ideas we have inherited from the period in which the intellectual world was dominated by a religious outlook.[190]

It is perhaps not surprising then, if the Catholic Church—hearing the simultaneous clamour for a paradigm shift or Copernican revolution in our traditional ethics from ecotheologians and from opponents of our sanctity of life ethic (especially if some of those calling for a shift towards biocentric ethics are in fact the same people who are advocating for abortion, euthanasia and population control)—might be concerned that conceding to one would in effect amount to embracing both these agendas. However the question we need to pose is whether or not such a connection inevitably exists at a philosophical level? If it does, it will be clear that worries that the taint of biocentrism in the hypothetical development of Vatican teaching in that direction in fact threatens other areas of traditional ethics in a way that Catholics would wish to avoid.

Scholars have developed a whole range of different philosophical constructions of the ethical question of human relationship to other animals and to the natural world more generally; it is beyond the scope of this thesis to give a complete account of the vast literature on this subject. However, in answer to Grisez's concern that proponents of animal rights reject the Christian view of persons; this is clearly true of Singer who, as we have seen, describes himself as spearheading a revolution to purge the last vestiges of an irrational Judeo-Christian sanctity of life ethic from our legal system. It is less clear whether or not Tom Regan, author of a quite different and extremely influential account of animal rights, can reasonably be said to advocate the diminishment of moral and legal protection of vulnerable human persons. Grisez argues that Regan's view is dependent

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[189] Dave Foreman, Letter to the Editor, *The Nation* (12 December 1987); quoted in Whelan, 'Greens and People', p. 75, n. 61.

[190] Peter Singer, *Rethinking Life and Death: The Collapse of Our Traditional Ethics*, (Oxford, OUP, 1994) p. 189; quoted in Charles C. Camosy, *Peter Singer and Christian Ethics: Beyond Polarisation* (Cambridge, UK and New York: Cambridge University Press, 2012), p.1.

on—since it is developed by dialectic with—the more common, utilitarian view, of which he treats Singer's articulation as typical. As Grisez notes, Regan argues for vegetarianism and the cessation of experiments on mature mammals, but considers the rights of unborn and newborn human beings 'a special problem to which he offers only a tentative solution.'[191] Regan's argument on this point repays closer attention: he begins by setting up as a possible objection to the animal rights view he himself advocates—one that is remarkably similar to the objection that Grisez himself raises—which he then proceeds to deconstruct. This objection, Regan explains:

> contests the rights view because of its alleged implications concerning abortion and infanticide. Since individuals who are not subjects-of-a-life are not recognised as having rights, according to the rights view, and since neither human foetuses nor newborn infants are subjects-of-a-life, it follows, so it is alleged, that the rights view implies that we may do anything we please to human foetuses and infants. Since no moral theory can be adequate if it has this implication, however, the rights view is not the adequate theory its advocates suppose.[192]

Regan replies to this anticipated objection that the rights view he advocates advances the subject-of-a-life criterion as a sufficient condition for possessing inherent value and by implication basic moral rights, but does not assert that this is a necessary condition for a being to be ascribed rights. This is an important distinction: an animal is a subject-of-a-life, on Regan's view, if it is possessed of the intelligence and introspection to perceive itself as an entity that has an anticipated future and would therefore be wronged, if killed and thereby deprived of the realisation of this anticipation, in a way that a sentient being lacking in such self-awareness would not; but Regan does not assert that beings who do not fulfil the subject-of-a-life criterion therefore cannot or should not be ascribed any rights. In fact even Singer's preference utilitarianism does not require the conclusion that we are free to do 'anything we please'—to borrow Regan's phrase—to sentient beings lacking the capacity for self-awareness. Regan—who makes an animal rights case for vegetarianism—would allow such beings a 'right' not to be killed and eaten. It is hard to imagine how this position could be consistent with proposals that society should allow sentient beings such as comatose patients or unborn children to be killed. Singer, who is himself a vegetarian but nevertheless argues that humanely killing and eating certain categories of sentient being cannot be said to 'wrong them,' does not argue that there are no ethical boundaries on the types of treatment to which they should normally be subjected. Of course, for Singer, it seems that the overall weighing of utility does imply that in cases where there is a conflict between the interests of the individual and the overall maximisation of utility, the normal rules may be overridden; Regan's theory, by contrast, would seem to imply that 'rights' are not vulnerable to any overriding consequentialist calculation.

Regan further argues that the rights view does not assert that human foetuses and infants fail to satisfy the subject-of-a-life criterion. He explains:

> The status of human infants and foetuses in this regard is controversial. It is not obviously true that the newly born or soon-to-be-born have beliefs, desires and the like, and neither is it obviously true that they lack these mental attributes. Whether or not they do, in short, is an open and much debated question. Though it is beyond the scope of the present work to enter into this debate, it should be clear

[191] Grisez, *Living a Christian Life*, p. 783 n. 48.

[192] Tom Regan, *The Case for Animal Rights*, (Berkeley and Los Angeles, California: University of California Press, 2004), p. 319.

> that the rights view leaves the question central to this debate an open question. And that is a virtue, not a vice, of this view.[193]

Furthermore, Regan argues, even if we assert that human foetuses and infants do not satisfy the subject-of-a-life criterion, and that they lack any rights—neither of which he himself asserts—it would not follow that we are at liberty to do whatever we please with them.

> The rights view advocates taking steps that foster the creation of a moral climate where the rights of the individual are taken very seriously indeed. Better then, to adopt a policy that errs on the side of caution when the recognition of moral rights is at issue. Precisely because it is unclear where we should draw the line between those humans who are, and those who are not, subjects-of-a-life, and in view of our profound ignorance about the comparative mental sophistication of newly born and soon-to-be-born human beings, the rights view would advocate giving infants and viable human foetuses the benefit of the doubt, viewing them as if they were subjects-of-a-life, as if they have basic moral rights, even while conceding that, in viewing them in these ways, we may be giving them more than is their due […] it is the importance of fostering an environment in which individual rights are respected […] that underpins the serious moral protection extended to newly-born and soon-to-be-born human beings.[194]

It seems then that the moral protection of human foetuses and infants is not necessarily incompatible with the ascription of rights to animals and a nuanced biocentrism that does not require that even animals—leaving aside the contested moral status of other biological entities—should be accorded either some moral rights or full moral equivalence with human beings would seem to be a theoretical possibility. Defending his version of Catholic animal rights against Christopher Tollefsen's view that non-human animals—as a sub-set of God's creation—are 'in some sense, created as a gift for human beings' and that membership of the justice community depends upon moral equivalence between human beings and prospective new members, Charles Camosy argues that:

> Tollefsen represents a generation of pro-lifers who grew up believing that those concerned with moral treatment of animals were the enemy. They had good reason to think this: Peter Singer and others in the early animal rights movement explicitly connected concern for animals with disregard for the value of human life, and especially the lives of prenatal children. But this is no longer the case of [sic] the pro-life movement of the contemporary era, especially as more and more young defenders of human life are also convinced that they must live lives consistent with serious moral concern for animals. This should not be surprising. The fundamental moral orientation of pro-lifers concerns itself with protecting vulnerable populations—especially victims of horrific violence. Pro-lifers are particularly sensitive to the marginalization of the voiceless whose dignity is inconvenient to those who have power over them. That more pro-lifers are now becoming a voice for just treatment of both animals and prenatal children does not imply a false moral equivalence between these two concerns. Rather, it demonstrates that—when stripped of the political baggage that characterized the relationship in the 1970s and '80s—the pro-life and pro-animal movements share much of their moral orientation in common.[195]

To sum up, I have argued in this section that the twin threats Dorr identifies as associated with biocentric ethics and, in his view, responsible for the persistent anthropocentric focus of Vatican

[193] Regan, *The Case for Animal Rights*, p. 319.

[194] Regan, *The Case for Animal Rights*, pp. 319–320.

[195] Charles C. Camosy, 'What we Owe Animals: A Response to Christopher Tollefsen' Public Discourse, 24 February, 2014. http://www.thepublicdiscourse.com/2014/02/12114/ [accessed 19 October 2015].

teaching: namely the taint of pantheism and the connection between the ascription of rights to animals and the removal of protection for the rights of pre-natal and neo-natal children are not necessarily entailed by a sufficiently nuanced biocentrism. I would conclude that it is theoretically possible to construct an authentic Catholic ecotheology without radically reconstructing traditional doctrines concerning the nature of God or the nature of justice requirements within the human community. In doing so there are two already well-articulated options: One could argue for a scaled biocentrism, as Camosy does, based on a concept of species-appropriate dignity grounding a hierarchical assignment of rights to other animals and biological entities, or alternatively one could argue—as Grisez does, as I shall show in my next chapter—for unique human dignity and rights coupled with a concept of inherent value in nature.

For Dorr, it seems that recognition of inherent value in nature[196] is a central part of the development towards biocentrism he hopes the present pontiff will signal in his forthcoming encyclical on the environment. On Dorr's interpretation, the current stance of Catholic social teaching does not go quite that far in accommodating the agenda of the ecotheologians, although he sees Benedict XVI's notion of nature's grammar as a helpful development that brought him tantalisingly close to taking the final 'short step' towards actually endorsing the notion that each of the elements of nature has its own inherent value. This is interesting, since it should be clear that Grisez's theological methodology requires him to think and reflect with the Church not in opposition to it and he clearly would not construe his own environmental ethics as a theological innovation or a radical departure from received moral doctrine. Likewise, Camosy clearly sees his role as a moral theologian as the faithful articulation of the Catholic tradition in our contemporary context and the attempt to live consistently with Catholic principles. Again, he does not share with the majority of ecotheologians the desire for a radical restructuring of Catholic theological ethics.

So as we can see there is an interesting scholarly debate over the actual content and correct interpretation of Catholic social teaching on this issue. In order to adjudicate this debate, in the interests of gaining a clearer understanding of the Church's current position and to speculate as to how this might develop under Francis's pontificate, in the light of the climate challenge and the increasing urgency of ethical questions pertaining to the relationship of our species to animals and other aspects of creation, it will be necessary to look more closely at Dorr's thesis that CST currently articulates an ecologically damaging anthropocentrism. Hence the aim of my next section is to examine the extent to which recent papal teaching can be said to be anthropocentric but undergoing a progressive 'greening' and to what extent what Dorr refers to as a 'highly nuanced anthropocentrism' in fact frustrates the objectives of the environmental movement.

Section Two: Critiques of CST on Ecology

In this section, I shall argue that the frustration of some prominent ecotheologians with what they see as ecologically damaging anthropocentrism in current Catholic social teaching is in fact unwarranted. Vatican anthropocentrism is highly nuanced and capable of supporting extensive ecological values and principles. The primary problem that theologians need to address, I shall argue, is not the ecological inadequacy of Papal thought so much as a collective failure by the Catholic community to translate existing doctrine into strategies and initiatives to enable Catholics to live consistently with Church teaching on the environment.

[196] Dorr, *Option for the Poor and the Earth*, p. 426.

This section will address the question: 'has there been a "greening" of Catholic social teaching in response to the ecological crisis?' This is the crux of Dorr's thesis in chapter eighteen of his *Option for the Poor and for the Earth* as we have seen in the previous section. Yet Charles Camosy's Catholic animal rights ecotheology and Germain Grisez's endorsement of inherent value in nature suggest the possibility of an alternative construction of recent Church history: that green values are in fact deeply embedded in the Catholic tradition, such that the context of increased ecological concerns and reflection on these 'signs of the times' has led to a recovery of environmentalism from within the Church's own inherent resources rather than a progressive reconstruction of Catholic moral theology towards accommodating the agenda of radical ecotheology. So my first question will be: does this dominant narrative of a 'greening of the papacy' accurately describe the evolution of Vatican thought on ecology? As we shall see, this question is much more complex than we might initially suppose. We need to ask whether the Catholic tradition is correctly characterised as anthropocentric—as many ecotheologians uncritically presuppose—and if so, whether this perspective is necessarily opposed to ecological values of stewardship and sustainability. If a closer analysis reveals that the tradition is not anthropocentric, this would raise interesting theoretical questions concerning the possibilities open to Pope Francis as he reflects upon our deepening ecological crisis. It would also beg the question as to whether a shift in emphasis towards designing more effective strategies and initiatives through which CST might be put into practice by faithful Catholic congregations might be a more fruitful direction for ecotheology than further advocacy for a radical paradigm shift in moral theology that—I would suggest—contributes to an unhelpful perception of the field as inherently revolutionary and associated with unsound moral philosophy and theological heresy.

The dominant narrative—derived from the work of a number of influential scholars—has been one of a progressive development of recent papal thought towards an ecological reconstruction of the central principles of the *common good* tradition. This historical construction suggests a *critical-creative* methodology as an appropriate theological approach to the perceived ecological shortcomings endemic within social Catholicism. On the other hand, if—as I shall argue—the premise of this narrative is at least not unassailable, it opens up the possibility that an alternative methodology—one that seeks to illuminate the ecological crisis with the unchanging light of moral truth whilst respecting the integrity and coherence of the doctrinal corpus[197]—might be appropriate and potentially fruitful. Having thus explained the rational for this project's choice of methodology, and situated the contribution of this thesis to the field of Catholic ecotheology, we shall proceed—in chapter four—to an in-depth examination of the environmental ethics of one very eminent and influential American conservative Catholic theologian Germain Grisez.

The Dominant Narrative: The Greening of the Papacy

My aim in this section is to examine the perceived evolution of some key conceptual elements of Catholic social teaching within the work of a selection of Catholic ecotheologians. One might begin

[197]'[T]here is a single teaching, consistent and at the same time ever new. It is one thing to draw attention to the particular characteristics of one Encyclical or another, of the teaching of one Pope or another, but quite another to lose sight of the coherence of the overall doctrinal corpus. Coherence does not mean a closed system: on the contrary, it means dynamic faithfulness to a light received. The Church's social doctrine illuminates with an unchanging light the new problems that are constantly emerging. This safeguards the permanent and historical character of the doctrinal "patrimony" which, with its specific characteristics, is part and parcel of the Church's ever-living Tradition' Benedict XVI, *Caritas in Veritate* #12.

by offering an account of this evolutionary process as it is expounded by each of these scholars individually. The advantage of this approach would be to highlight their differences in the nuances of analysis and recommendation for doctrinal revision. I have eschewed this approach here. Instead I have chosen to organise this chapter conceptually, separately discussing the pertinent principles of the Catholic tradition that are said to be evolving in response to heightened ecological concern. This serves to emphasise the underlying narrative of a 'greening of the papacy' which—I shall argue—is common to the work of these otherwise quite diverse scholars. In order to paint this bigger picture, my treatment of individual ecotheologians will necessarily be somewhat impressionistic; my hope is that this will not be at the expense of over-simplification. Firstly, I shall consider the idea of an ecological expansion of the *preferential option for the poor*—drawing mainly on the work of Donal Dorr and Jame Schaefer—and secondly, I shall examine the evidence for an evolution in the central tenets of the *common good* tradition—*solidarity* and *subsidiarity*—and the expansion of the scope of the concept of the *common good* itself as constructed within this dominant narrative of a 'greening' of Vatican teaching.

The Preferential Option for the Poor

The first edition of Donal Dorr's *Option for the Poor* surveyed one hundred years of Vatican social teaching; in 2012 the book, having been extensively revised, was reissued under the title *Option for the Poor and for the Earth*. As the author explains: 'it has become much clearer in the intervening years that there is an inseparable link between an option for the poor and an option for the earth; so, I have greatly expanded my treatment of the ecological issue […] chapter 18 is an extended examination of the issue of ecology as it has been treated in documents from the Vatican for over half a century.'[198] Dorr charts the history of environmentalism in recent Catholic social teaching, critiquing what he sees as its recalcitrant anthropocentricism, the insufficient urgency of Papal calls to respond to the crisis and the failure to integrate the ecological dimension as the context within which all our human concerns—and especially our approach to economics—now need to be located. Dorr calls for a theological conversion corresponding to John Paul II's call for 'ecological conversion', namely 'the rethinking of Catholic social teaching in the light of an ecological paradigm.'[199]

The idea of an 'option'[200] or 'preference' for the poor—for Dorr the central organising principle of Catholic social teaching—has deep roots in the Judeo-Christian tradition. As Jame Schaefer explains: 'admonitions to attend to the poor and vulnerable permeate the prophetic books of the Hebrew Bible and the teachings and life of Jesus'[201] Drawing on this scriptural foundation 'the bishops of the Roman Catholic Church have consistently taught that the basic test of a society from a Christian perspective is how its most vulnerable people are faring and they instruct the faithful to put the needs of the poor and vulnerable first when making and carrying out decisions individually and in

[198] Dorr, *Option for the Poor and for the Earth*, p. v.

[199] Dorr, *Option for the Poor and for the Earth*, p. 431.

[200] Christopher Vogt warns that 'the name can be misleading, because having a deep concern for the poor is not actually considered optional for Roman Catholics.' Vogt, Catholic Social Teaching and Creation, p.230.

[201] Schaefer, 'Solidarity, Subsidiarity and Preference for the Poor: Extending Catholic Social Teaching in Response to the Climate Crisis', in: Jame Schaefer (ed) *Confronting the Climate Crisis*, 389–425, p. 401, quoting as examples: Exodus 22: 20–26, Leviticus 19: 9–10, Job 34: 20–28, Proverbs 21: 8–9; Sirach 4:1–10, Isaiah 25: 4–5, Isaiah 58:5–7, Matthew 25: 34–40, Luke 4: 16–21 and 6: 20–23, and 1John 3: 17–18.

association with others at all levels of governance.'[202] As the US Catholic Bishops have expressed this principle:

> From the scriptures and church teaching we learn that the justice of a society is tested by the treatment of the poor. The justice that was a sign of God's covenant with Israel was measured by how the poor and unprotected—the widow, the orphan and the stranger were treated. The kingdom that Jesus proclaimed in his word and ministry excludes no one. Throughout Israel's history and in early Christianity, the poor are agents of God's transforming power. 'The Spirit of the Lord is upon me, therefore he has anointed me. He has sent me to bring glad tidings to the poor (Luke 4:18). This was Jesus's first public utterance. Jesus takes the side of those most in need. In the Last Judgement, so dramatically described in St Matthew's Gospel, we are told that we will be judged according to how we respond to the hungry, the thirsty, the naked, the stranger. As followers of Christ, we are challenged to make a fundamental option for the poor—to speak for the voiceless, to defend the defenceless, to assess life-styles, policies and social institutions in terms of their impact on the poor.[203]

Since the first great social encyclical, *Rerum novarum*, in which Leo XIII protested the miserable condition of the working poor in emerging industrial economies, the Roman Catholic Church has consistently stressed the importance of giving preference to the needs of the poor, the suffering and the vulnerable in our moral deliberations and in Christian social action. This principle is closely associated with the doctrine of 'the universal destination of goods': as the Fathers and Doctors of the Church taught, and the second Vatican Council reaffirmed,[204] there is an obligation to come to the relief of the poor and that this principle overrides the duty to respect private property in cases of destitution.[205] As Jame Schaefer points out, however, the 'preference for the poor' in Catholic social teaching is not an adversarial slogan[206] that pits one group or against another in a Marxist class struggle. Although the phrase 'option for the poor' originates from Latin American liberation theology, Dorr comments—correctly in my judgement—that Benedict XVI's use of the term:

> does not link it to a clear choice to be on the side of those who resist oppression and who are willing not only to struggle for justice but to do so by sharp contestation with those who oppress them. There is no indication that Benedict himself experiences such contestation and struggle as intrinsic to his own spirituality […] a better way to describe the stance of Benedict is to say that it involves not so much an option for the poor in the sense in which the term is properly understood; for him it is more of a matter

[202] Jame Schaefer, 'Solidarity, Subsidiarity and Preference for the Poor', pp. 401–402.

[203] United States Catholic Bishops, *Economic Justice for All: Pastoral Letter on Catholic Social Teaching and the U.S. Economy*, 1986, 16 http://www.usccb.org/upload/economic_justice_for_all.pdf [accessed 19 October 2015].

[204] 'The Fathers and Doctors of the Church held this opinion, teaching that men are obliged to come to the relief of the poor and to do so not merely out of their superfluous goods. If one is in extreme necessity, he has the right to procure for himself what he needs out of the riches of others.' Second Vatican Council, 1965, *Gaudium et spes: Pastoral Constitution on the Church in the Modern World*. Promulgated by His Holiness Pope Paul VI #69; citing Saints Basil, Augustine, Gregory the Great, Bonaventure and Albert the Great; quoted in Schaefer, 'Solidarity, Subsidiarity and Preference for the Poor', p. 403.

[205] 'The right to private property, acquired or received in a just way, does not do away with the original gift of the earth to the whole of mankind. The universal destination of goods remains primordial, even if the promotion of the common good requires respect for the right to private property and its exercise.' Catechism of the Catholic Church, 2403. http://www.vatican.va/archive/ccc_css/archive/catechism/p3s2c2a7.htm [accessed 19 October 2015].

[206] Jame Schaefer, 'Solidarity, Subsidiarity and Preference for the Poor', p. 405.

> of having a preferential concern for the poor, linked to a deep and well-grounded commitment to justice in the world.[207]

For Dorr the notion of an option for the poor 'retains its full meaning, its implications and its challenge only as part of a spirituality that values and emphasises the concept of liberation, with its background of social analysis and its overtones of contestation and struggle.'[208] Be this as it may, it is clear—as Dorr acknowledges—that this is not the sense in which the term is used in Vatican teaching.

The fruits of this principle, when applied consistently with Catholic social teaching, far from fuelling class divisions in society, should be the enabling of disadvantaged people not only to meet their own consumption needs but to become active participants in the life of society, contributing to and sharing in the common good. The deprivation and powerlessness of the poor wounds the whole community; the extent of their suffering is a measure of how far we are from being a true community of persons whose inalienable dignity is respected and whose capacity for flourishing is not structurally impeded by exclusion or injustice in our society.

Within liberation theology, the preferential option for the poor is closely connected with the 'epistemological privilege of the poor'. The poor—in their struggle against the alienation and despair of poverty—tend to be more dependent on God and spiritually closer to him than those who are confident of being able to rely on their own resources. They live in the place—poverty—where God has taken preferred root in order to support and comfort the afflicted.[209] God chose the weak to shame the strong[210] and makes them his privileged instruments in reading the signs of the times and sharing in Christ's saving work. Thus, in the project of alleviating poverty and creating a just social order, the knowledge and experience of the poor themselves is a valuable resource; the project requires their socio-political empowerment so that they are enabled to be drivers of the social justice agenda not mere recipients of relief or patronage.

For Dorr, the option for the poor is actualised through commitment by individual Catholics and the Church actively to engage at every level in a struggle to overcome the social injustices that mar our world. To be genuine it must not perpetuate the powerlessness and dependency of disadvantaged people, instead it should arise out of a genuine experience and expression of solidarity as we share in the lives, 'the joys and the hopes, the griefs and the anxieties of the men of this age, especially those who are poor or in any way afflicted'. In order for the whole Church to embody her operant theology in authentic practice and reflection—and to function as the matrix from which official teaching emerges[211]—it is therefore crucial for individual Catholics to live and work amongst the

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[207] Dorr, *Option for the Poor and for the Earth*, p. 389; citing Cécile Renouard, (2010) 'Relational Capitalism: Justice and Gift in Corporate Activities according to Caritas in Veritate' http://www.stthomas.edu/media/catholicstudies/center/johnaryaninstitute/conferences/2011-vatican/RenouardPCJPPaper.pdf [accessed 19 October 2015].

[208] Dorr, *Option for the Poor and for the Earth*, pp. 388–389.

[209] Christine E. Gudorf, 'Commentary on *Octogesima adveniens (A Call to Action on the Eightieth Anniversary of Rerum novarum)* in: Kenneth R. Himes, O. F. M. (ed.) *Modern Catholic Social Teaching: Commentaries and Interpretations,* (Washington DC: Georgetown University Press, 2005) pp. 315–332 at p. 323.

[210] 1 Cor. 1: 27–28.

[211] There is 'a "complex living tradition of practice and thought, a continuing learning process at the point of intersection of gospel with life" […] All this practice and reflection is the matrix from which the official teaching emerges, although very little of it is ever acknowledged in the official documents.' Dorr, Option for the Poor

vulnerable and marginalised and to share in their struggle for social justice, since in so doing we are enabled to share in what Dorr calls 'the view from below', a perspective to which those cocooned by wealth and status are infrequently exposed.

An Option for the Earth as an Emerging Principle of CST

As we have seen, for Dorr, the option for the poor in Catholic social thought is not just one amongst several guiding principles, rather, it functions as the central motif of authentic Catholicism tying together and colouring our perception of other elements of Church teaching such as property rights, solidarity, subsidiarity, participation and human rights.[212]Against this backdrop, it is no surprise that Dorr introduces the growing awareness within the Church of our looming ecological crisis with an impassioned plea for climate justice, which he advocates on behalf of voiceless future generations and those most vulnerable to—and least able to adapt to—devastating changes that are already causing huge problems for disadvantaged people. Noting, as specific examples, the effects of sea-level rise on the inhabitants of Pacific atolls and river deltas in countries like Bangladesh, as well as glacial depletion in the Himalayas—which threatens fresh water supplies for millions of people—and droughts in eastern and southern Africa caused by changes to rainfall patterns, Dorr insists that 'the question of "eco-justice" must now be treated as an overriding issue of the social justice agenda, the background against which all international and national planning decisions about economics need to be taken. The problem of global climate change will not be solved, Dorr warns, unless we are prepared to accept the personal moral challenge posed by the eco-justice agenda and to reconsider both our own lifestyle choices and the values we choose to stand for in electing our politicians:

> In recent years it has become increasingly obvious that even our most pressing economic and political problems need to be situated within the context of the ecological issues that threaten life on Earth as we have come to know it. This is the background against which we need to deal with all the other issues of the social justice agenda.[213]

This analysis of the climate crisis and related ecological problems in terms of their effects on vulnerable human beings is certainly a strong argument for Catholic engagement in advocating greenhouse gas mitigation efforts as an imperative of social and intergenerational justice. If, as Dorr argues, the fundamental option for the poor is the pivotal concept in Catholic social teaching, its extension—to embrace the ecological causes of social injustice and conflict—brings action for climate justice under the wider umbrella of Catholic responses to issues of justice, peace and social responsibility. This makes sustainability central to the Church's mission to 'make salvation integral',[214] and central to the apostolic responsibility of all Catholics as they each live out their individual vocation as a specific embodiment of our shared faith and calling.

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and for the Earth, pp. 6–7; quoting Johan Verstraeten 'Towards Interpreting the Signs of the Times, Conversation with the World and Inclusion of the Poor: Three Challenges for Catholic Social Teaching', *International Journal of Public Theology,* 5, No. 3: pp. 314–330.

[212] 'In choosing to write about an option in favour of people who are poor or marginalised, I am not just selecting one particular aspect of Catholic social teaching and leaving aside other important issues of social justice. My belief is that choosing to be in solidarity with those who are poor and opting to work with them for justice gives one a new perspective on the other elements of Catholic social teaching.' Dorr, *Option for the Poor and for the Earth*, p.3.

[213] Dorr, *Option for the Poor and for the Earth*, pp. 5–6.

[214] Grisez, *Living a Christian Life*, p. 104.

Even in the absence of a Liberation theology perspective giving centrality to the 'option for the poor' in Catholic social teaching, there is a clear mandate for all Catholics to engage in local action to give concrete expression to other Catholic principles, such as the call for *ecological conversion*, through projects and initiatives to enable the transition to sustainability. As Celia Deane-Drummond comments: 'the call for ecological conversion is *theologically conservative* in that it does not demand a weakening of the place of the human, but calls for a fundamental awareness of the interconnectedness of human beings to all forms of life and human responsibility in the light of that interconnection.'[215] Yet active Catholic engagement in ecological conversion, including the lifestyle change required for its implementation and clearly mandated as an imperative of Vatican teaching, would hardly be *politically conservative* in its effects—if 'conservative' is interpreted as tending to perpetuate 'business as usual' economic activity without regard for ecological and social externalities. As Dorr comments in relation to Benedict XVI's vision for economic restructuring in *Caritas in veritate*—which in my view provides a blueprint for the future green economy—there is unfortunately little evidence that serious efforts have been made by lay Catholics to actualise this vision[216] through entrepreneurial endeavour; yet—as Dorr puts it—if a sufficient number of Christians and other people of goodwill were to take *Caritas in veritate* seriously and act upon it, 'this could change the world.'[217] Projects seeking to respond to the call for ecological conversion can further the environmental agenda even where the motivation behind them is purely anthropocentric. Certainly there is much to be gained, both for the Church and for the environmental movement, in putting aside philosophical differences in order to work together as people of faith and goodwill on practical projects towards the achievement of shared climate justice goals.

However the question remains as to whether the Catholic tradition is correctly categorised by ecotheologians as anthropocentric, and whether this species bias needs to be renounced in order for Vatican teaching to appropriately embody an ecological ethic in the light of the climate crisis. As regards both of these questions, Nairn, Schaefer and Dorr join with other voices in ecotheology[218] in critiquing the inherent anthropocentricism of the tradition and recommending a paradigm shift towards ecocentricism as the remedy for its philosophical deficiencies. The argument that traditional Christian anthropocentricism is incompatible with an ecological ethic—and the corollary that, historically, Christian beliefs have been a major driver of ecological damage—was, as we have noted, most famously espoused by historian Lynn White.[219] Notwithstanding a huge literature devoted to Christian attempts to refute this thesis, the ecological perniciousness and hence the pressing need to overcome this human-centred perspective and move towards what Sallie McFague calls an 'ecological Catholicity'[220] remains a persistent theme in the work of Catholic ecotheologians.

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[215] It is not clear whether she intends this as a criticism of the Vatican position or simply as a statement of fact. See: Deane-Drummond, Joining in the Dance, p. 211.

[216] Dorr, *Option for the Poor and for the Earth*, p. 408.

[217] Dorr, *Option for the Poor and for the Earth*, p. 409.

[218] Celia Deane-Drummond considers the challenge to anthropocentrism 'one of the core values in ecological science'. Celia Deane-Drummond*, Ecotheology*, p. 11.

[219] Lynn White, 'Historical Roots of our Ecological Crisis' (1967) *Science*, 155: 1203–7.

[220] Sallie McFague, *A New Climate for Theology: God, the world and global warming* (Minneapolis, Fortress Press, 2008), p. 35.

Dorr's critique of Vatican teaching as recalcitrantly anthropocentric arises from his historical survey of the development of the ecological perspective in the post-Vatican II period. However, as Thomas Nairn points out, reflection on the relationship between humankind and the rest of creation has deeper roots in Church tradition. Writing in 1994, when most of the developments discussed by Dorr were still in the future, Nairn helpfully contributes a longer perspective on the development of social Catholicism, which—in combination with Dorr's more recent work—provides a complete historical narrative of the 'greening' of Catholic social teaching. Nairn identifies three different stages of development:

> As regards ecology, this tradition can be seen as having at least three different, though related, phases: the first from Leo XIII until the beginning of the Second Vatican Council, the second from the Council through the pontificate of Pope Paul VI, and the third during the present pontificate of John Paul II. Although these phases are in fact different, they revolve around two common rubrics: in each the Church situates the question of the environment within the larger context of justice and the common good.[221]

Nairn critiques the concept of a hierarchical 'natural order'—prevalent in the first of his three phases—which on his account regarded humankind superior to other aspects of creation, concurring with Aristotle and Aquinas that 'since nature makes nothing purposeless or in vain, all animals must have been made by nature for the sake of humans.'[222] He concludes that this phase in the development of Vatican teaching displayed 'deep ambivalence regarding ecological questions' and lacked the analytic tools to ground a fully developed ecological ethic.[223]

Nairn's second phase—that of 'human interdependence' was initiated by the Second Vatican Council which, Nairn argues, replaced the earlier rigidity of the natural law and its abstract notion of order with a more experiential worldview that took as the starting point for theological reflection the actual concrete experience of men and women. Although Nairn sees the imagery of the signs of the times and a world in the pangs of childbirth as 'potentially a more apt vision upon which to build an ecological theology', *Gaudium et spes* still analyses the environment and ecological questions in terms of human interdependence.[224] Whilst relationship to others in love and justice is essential to the divine image in humanity, the 'others' in question remain exclusively human others.[225]

Nairn's third phase—that of human co-creation—continues this anthropocentric focus: For John Paul II, on Nairn's account, creation is made for humans and the focus of his treatment of the ecological crisis is on the human consequences of exploitation of nature in making us less attentive to the needs of the weak and vulnerable among us. Nairn concludes:

> When one looks at the Church's contemporary social tradition as described above, one sees certain constants within all three phases: the centrality of the notion of the common good, a corresponding notion of harmony and order, human interdependence, a distinction between the instrumental value of material creation and the intrinsic value of humanity, and a setting of the ecological question within

[221] Nairn, 'The Roman Catholic Social Tradition and the Question of Ecology', p. 27.

[222] Aristotle, *Politics*, 1256b; quoted in Nairn, 'The Roman Catholic Social Tradition and the Question of Ecology', p. 28.

[223] Nairn, 'The Roman Catholic Social Tradition and the Question of Ecology', p. 29.

[224] Nairn, 'The Roman Catholic Social Tradition and the Question of Ecology', p. 31.

[225] Nairn, 'The Roman Catholic Social Tradition and the Question of Ecology', p. 30.

> that of human society. In spite of differences, in each period the ecological question soon risks becoming instead a question of how humans relate to one another. As important as this consideration is it is insufficient to ground a significant ecological ethic. Indeed it suggests that the conflict between what is good for nature and what is good for poor people and poor nations will very well continue.[226]

Dorr's analysis begins with John XXIII, but focuses mainly on the pontificates of John Paul II and Benedict XVI. Although he draws attention to many positive developments in Catholic social teaching on ecology and on the climate crisis specifically, like Nairn before him Dorr still concludes from his more up to date survey of post-conciliar teaching on ecological questions that anthropocentricism remains a problem that is endemic within the tradition:

> In the light of the overall approach adopted in the many documents to which I have referred […] it is, I believe, reasonable to say that Catholic social teaching, as it is expressed in official Vatican documents on ecological issues, is basically anthropocentric in outlook. By this I mean that it consistently puts humans at the centre, that the value judgements it makes are generally made in terms of what will be of benefit to humans and that it shows a marked reluctance to put any emphasis on what we might call the intrinsic value of animals, plants, forests, scenery and all the other myriad nonhuman aspects of creation.

However, Dorr's critique adds two important qualifications: firstly, Vatican anthropocentricity is *nuanced* and secondly it cannot reasonably be accused of providing a scriptural or theological justification for heedless exploitation of the earth. In calling the magisterial approach 'nuanced', Dorr stresses that the teaching is balanced by a strong emphasis on God's prerogative as creator which demands we respect the integrity of the created order. In contrasting Catholic teaching with the commonly assumed—if rarely articulated—assumption in secular society that humans are at liberty to exploit nature for our own benefit, Dorr argues that the legacies of Popes John Paul II and Benedict XVI contradict this interpretation of human dominion as absolute power over the natural world.

> Precisely because John Paul and Benedict are good theologians, their anthropocentric approach is located within a God-centred vision. If committed Christians and other people of goodwill take seriously the teaching of these popes on environmental issues, they can help to bring about the 'ecological conversion' that the popes call for and can play their part in solving the environmental problems that our world now faces.[227]

However, having insisted that Vatican teaching has not been guilty of justifying human exploitation of nature, Dorr nevertheless feels that 'it does not emphasise sufficiently the sheer urgency of the need for a model of human development that respects the environment and repairs the damage already done to it' and that it 'does not sufficiently insist on the serious moral obligation of all Christians and all people of goodwill to work for the adoption of such a model'[228] and he agrees with the many ecotheologians who express dissatisfaction with the current Vatican position. As we saw earlier in this chapter, he laments the fact that Pope Benedict XVI 'did not locate everything he has to say about human responsibility and business activity in this time of economic crisis within the broader context of the ecological crisis of our time' and characterises his teaching as emerging 'from

[226] Nairn, 'The Roman Catholic Social Tradition and the Question of Ecology', p. 37.

[227] Dorr, *Option for the Poor and for the Earth*, p. 430.

[228] Dorr, *Option for the Poor and for the Earth*, p. 427.

an older anthropocentric paradigm where ecological issues are treated almost entirely in terms of present-day human concerns.'[229]

Dorr argues that there are two interrelated barriers to a movement towards biocentric thought in Catholic social doctrine: firstly there is a concern that ecotheology plays down the transcendence of God, sometimes to the point of embracing nature worship, and secondly there is a desire to uphold the concept of unique human dignity. As regards the first, Dorr suggests that ecotheologians can rebalance the Vatican's over-emphasis on transcendence by renewing attention to incarnational, immanent aspects of authentic Christian understanding of the Godhead. This need not result in a denial or neglect of the transcendence of God. Dorr says 'it is unfair to assume that ecotheologians agree with those who divinise nature or adopt a pantheistic position.'[230] However, whilst it may be unfair to assume this of all ecotheologians, there are scholars working in this field—as we have seen—who have embraced the divination of Gaia, advocated neopagan animism or broadened the scope of the incarnation's significance to the point of blurring the distinction between God and creation.[231] On the other hand, as Dorr points out, there are deeply committed ecotheologians like Denis Edwards—who argues in favour of a 'biblical theocentric vision'[232]—and John Feehan, who grounds his concept of ethical kinship and consanguinity between all God's creatures in Thomas Aquinas's argument that nature is not intended primarily for us, but was created for God's own pleasure.[233] I would agree with Dorr that there is no necessary connection between radical theological revision and emphasising care for creation; this thesis argues that Germain Grisez's environmentalism goes beyond the current Vatican position and hence opens up possibilities for developments in Catholic social doctrine in this area, within a worldview that does not fundamentally challenge Roman Catholic theological orthodoxy.

The second concern that Dorr identifies is less easily resolved, although a number of suggestions have been put forward. Dorr himself proposes that Bernard Lonergan's writings might suggest a resolution: Lonergan sees value as an emergent property of complex systems—humans represent a level of complexity at which the capacity to apprehend and create value emerges. But this does not give us the moral right to use the rest of creation for our own exclusive benefit; our call is to use both our rational capacities and our affective-empathetic links with other creatures to find ways to live responsibly, respectfully and contemplatively as humans in the world.[234] Along similar lines, Christopher Vogt suggests that Daniel Cowden's nuanced discussion of human exceptionalism, whilst offering a critique of the Vatican's insistence on an axiological and ontological distinction between humans and other creatures, nevertheless remains sceptical about claims that humans are simply

[229] Dorr, *Option for the Poor and for the Earth*, p. 431.

[230] Dorr, *Option for the Poor and for the Earth*, p. 435.

[231] Deane-Drummond, *Ecotheology*. See n. 178-180 above.

[232] Denis Edwards, *Ecology at the Heart of Faith: The Change of Heart that leads to a New Way of Living on Earth* (Maryknoll, NY; Orbis Books, 2006); quoted in Dorr, *Option for the Poor and for the Earth*, p. 433.

[233] John Feehan, *The Singing Heart of the World: Creation, Evolution and Faith* (Dublin; Columba Press and Maryknoll, NY; Orbis Books, 2012); quoted in Dorr, Option for the Poor and for the Earth, p. 433.

[234] Bernard Lonergan, *Method in Theology*, Collected Works of Bernard Lonergan Vol. 14 (Toronto; University of Toronto Press, 1990, Original edition 1972); quoted in Dorr, *Option for the Poor and for the Earth*, pp. 435–436.

one species amongst many.[235] For good or ill, humans now occupy a unique position in our ability to nurture or destroy our common planetary home.[236] For Jame Schaefer, scientific evidence of our biological connection to other species seems to necessitate a move away from anthropocentric exceptionalism as a matter of intellectual honesty[237] as well as an ethical imperative in the light of the climate crisis. Similarly, Celia Deane-Drummond finds current Vatican teaching insufficiently informed by contemporary developments in the science of Ecology and inclined to romanticise the natural order or to understand it through the now discredited scientific paradigm of stability and immutability of species.[238]

This thesis proposes that the worldview described by Germain Grisez is capable of transcending the apparent contradiction between our status as fellow creatures with others in biotic community and continuity and our unique dignity as bearers of the *imago Dei*. The Vatican position seems to be underpinned by a concern that removing the ontological distinction between humans and other creatures, leading to recognition of rights for non-humans, would undermine the concept of unique human dignity and hence lead to the overriding or denial of the human rights of vulnerable sub-groups of our own species, such as incurably senile or comatose patients and pre-natal children whose development is at an early a stage and who therefore would not be recognised as 'human persons' by those looking for a medical criterion to justify the termination of their lives. This thesis argues that Germain Grisez—who has been one of the staunchest supporters of conservative Catholic teaching on issues relating to human dignity and the pro-life agenda—whilst he fully shares the Vatican's concerns and desire to retain the centrality of human dignity, is nevertheless able to contribute some interesting insights on issues like the theological basis for inherent value in nature that shed light on the potential for evolution of Vatican teaching on ecological questions.

Writing in 1994, during Blessed John Paul II's pontificate, Thomas Nairn considered the anthropocentric tendency to reduce ecological questions to issues of relationships between humans as a limitation of the tradition. On the other hand, he saw John Paul II's emphasis on contemplation of nature as a positive and potentially fruitful path towards an ecological ethic.

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[235] Vogt, 'Catholic Social teaching and Creation', p. 237; quoting Daniel Cowden, 'Towards an Environmental Ethic' in Kevin W Irwin and Edmund D. Pellegrino *Preserving the creation: Environmental Theology and Ethics*, (Washington DC; Georgetown University Press, 1994), p. 129.

[236] 'Human interaction with nature is ubiquitous and human action or inaction will inevitably have an impact on the future of non-human nature. The "is" of our entanglement with and unavoidable impact on nature leads to a moral "ought": Humans, because of who we are within nature, have particular responsibilities in relation to nature.' Christine Firer Hinze, 'Catholic Social Teaching and Ecological Ethics' in Drew Christiansen and Walter Grazer (eds.) *And God Saw That It Was Good* (Washington, DC; United States Catholic Conference, 1996), p. 169; quoted in Vogt, 'Catholic Social Teaching and Creation' in Winright (ed.) *Green Discipleship*, pp. 220–241 at p. 238.

[237] Schaefer recommends the extension of Catholic principles of solidarity, subsidiarity and the option for the poor beyond traditional anthropocentricism 'so that they are more realistic, more intellectually honest, more relevant and more helpful' in the context of the climate crisis. She asks 'are they sufficiently realistic and intellectually honest when recognising that Homo sapiens evolved from and with other species over millions of years?' The clear implication here is that insistence upon an ontological division between humankind and other animals whilst accepting the theory of evolution as the story of our origins creates a cognitive dissonance that must be resolved by rejecting human exceptionalism or maintained at the expense of intellectual integrity. Schaefer, 'Solidarity, Subsidiarity and Preference for the Poor', in Schaefer (ed.) *Confronting the Climate Crisis*, pp. 417, 409.

[238] Deane-Drummond, *Joining in the Dance*, p. 211.

> Contemporary ecologists suggest that the proper stance toward nature is one which avoids irreversible change, optimises natural diversity and emphasises natural stability. An ethics of appreciation can enable these sorts of choices by demonstrating the need to locate oneself in and reconcile oneself to the rest of nature. The questions of justice and the common good do in fact remain, but placing these issues in dialectic with a larger ethics of appreciation provides a more adequate grounding for ethical thought, a grounding which at the same time is able to situate the human person in the world as science sees it and, because of its basic spirituality, is able to speak not only to the human head but to the human heart.[239]

With the benefit of hindsight, we can see that Benedict XVI, although he returned to ecological questions repeatedly throughout his pontificate, did not in fact develop the tradition in the direction Nairn foresaw as a possibility latent within the thought of his predecessor. However, for Dorr, developments during Benedict's pontificate were nonetheless positive: He feels that John Paul II 'downplayed' the ecological issue by contrasting it with what he saw as the 'more serious' issue of 'the human environment'. Benedict XVI, by contrast, seemed to Dorr to take a more subtle approach in his insistence on an inseparable link between human ecology and natural ecology. In *Caritas in veritate*, Benedict includes the environment as a strand woven into the 'seamless robe' of integral humanism, and refers to nature as 'a wondrous work of the Creator containing a "grammar" which sets forth ends and criteria for its wise use, not its reckless exploitation.[240] For Dorr, 'the image of "grammar" is particularly helpful. It would only be a short step for him to go from this "grammar" of nature to affirming that each of the elements of nature has its own inherent value, but he does not take this final step.'[241] Dorr clearly finds this reluctance to embrace a new ecocentric paradigm—and to rethink other dimensions of Catholic social teaching in the light of this shift—frustrating.

Nevertheless, Dorr acknowledges major developments in Vatican teaching towards recognition of ecological issues and the emphasis given to the connections between environmental degradation and social injustice in global perspective. As regards the climate crisis, he highlights comments from both John Paul II[242] and Benedict XVI[243] on the problem of environmental and social externalities and the moral imperative of ensuring that the real costs of economic activity are borne by the contracting parties and not perforce underwritten by future generations or those less able to protect their own interests due to inequalities of wealth and power. Dorr concludes that it is now

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[239] Nairn, 'The Roman Catholic Social Tradition and the Question of Ecology', pp. 37–38.

[240] Benedict XVI, *Caritas in veritate*, #48.

[241] Dorr, Option for the Poor and for the Earth, pp. 425–426.

[242] 'The relationship between problems of development and ecology also demands that economic activity project and accept the expenses entailed by environmental protection measures demanded by the community, be it local or global, in which that activity takes place. Such expenses must not be regarded as an incidental surcharge, but rather as an essential element of the actual cost of economic activity.' John Paul II, Address to Session XXV of the Conference of the Food and Agricultural Organisation, 16 November 1989 http://www.fjp2.com/us/john-paul-ii/online-library/speeches/6524-address-to-the-xxv-session-of-the-conference-of-fao-november-16-1989- [accessed 19 October 2015]; quoted in Dorr, 'Option for the Poor and for the Earth', p. 417.

[243] There is a need to ensure that 'the economic and social costs of using up shared environmental resources are recognised with transparency and fully borne by those who incur them' Benedict XVI, *Caritas in veritate,* 50; quoted in Dorr, *Option for the Poor and for the Earth*, p. 426; Also 'a greater sense of intergenerational solidarity is urgently needed. Future generations cannot be saddled with the cost of our use of common environmental resources' Benedict XVI, *Message for World Day of Peace, 2010*, 8; quoted in Dorr, *Option for the Poor and for the Earth*, p. 427.

appropriate to speak of an 'option for the poor and the earth' as a dominant motif in Catholicism. Yet whilst—as we have seen—he acknowledges that magisterial anthropocentricism is nuanced and cannot be construed as justifying exploitative practices that pollute the planet, destroy or deplete natural capital and perpetuate social injustices, overall, he remains fundamentally dissatisfied with the Vatican position, calling for a 'theological conversion'[244] as a necessary adjunct to John Paul II's encouragement of 'ecological conversion' as the Church reflects on and responds—with an appropriate sense of urgency—to the climate crisis as a 'sign of the times'.

Christopher Vogt draws attention to three ways in which the 'option for the poor' has been invoked in Catholic social teaching on environmental ethics. Firstly, it has called attention to the burden on the poor consequent upon environmental degradation.[245] Secondly, it has noted that poverty can be a driver of ecologically destructive behaviour[246] and thirdly, it has stressed the need to balance conservation with the imperative of providing economic opportunities for the working poor by pursuing authentic human development.[247] However, Vogt stops short of endorsing the call by ecotheologians for the concept to be broadened to overcome its anthropocentricism by including ecological vulnerability as a new dimension to our concept of 'the poor'.

Jame Schaefer goes further: in discussing the possibility of extending the concept of an 'option for the poor' to include what Sallie McFague calls 'the new poor'—the suffering, vulnerable animal and plant species, ecological systems and the biosphere—she calls for a recognition of the intrinsic value of aspects of creation beyond our own species.[248] For Schaefer, a failure to move beyond valuing nature only instrumentally exhibits ignorance of our profound dependence on ecosystem services, ignorance of the cosmological to biological history out of which humans emerged, from and with other species, and the perpetuation of an anthropocentric mindset which—on her view—is ecologically damaging. Furthermore, for Schaefer, a failure to recognise intrinsic value in non-human aspects of creation is a failure of gratitude, both to the nurturing presence of our natural life-support system and to God as Creator.

The Evolution of the Common Good in the Anthropocene?

Dorr—as we have seen—emphasises the preferential option for the poor as central to the Catholic understanding of social responsibility, and indeed other principles of social Catholicism are closely aligned and interwoven with this Biblical motif. Another overarching principle employed in Vatican social doctrine has been the Thomist concept of the 'common good', which refers to the set of conditions under which a community and every member of that community may flourish[249] and

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[244] Dorr, *Option for the Poor and for the Earth*, p. 431.

[245] Vogt, 'Catholic Social Teaching and Creation' p. 231; quoting USCCB, *Renewing the Earth*, I. B.

[246] Vogt, 'Catholic Social Teaching and Creation' p. 231; quoting Dominican Episcopal Conference, 'Pastoral Letter on the Relationship of Humans to Nature' 21 January 1987, pp. 259–274. no. 5. http://home.sandiego.edu/~kaufmann/hnrs379/Dominican_Episcopal_Conference_1987.pdf [accessed 19 October 2015]

[247] Vogt, 'Catholic Social Teaching and Creation' p. 231–235.

[248] Schaefer, 'Solidarity, Subsidiarity and Preference for the Poor' in Schaefer (ed.) *Confronting the Climate Crisis*, pp. 389–425 at p. 417; quoting Sallie McFague, *The Body of God.*

[249] Daniel Scheid, 'Saint Thomas Aquinas, the Thomistic Tradition and the Cosmic Common Good.' In: Winright (ed.) *Green Discipleship* pp. 129–147 at p. 139; c.f. *Gaudium et spes* #26, in which 'the common good' is defined as 'the sum total of social conditions which allow people, either as groups or as individuals, to reach their fulfillment more fully and more easily'.

requires the creation and maintenance of just institutions to enable all members of society to participate and to actualise their potential. As Christopher Vogt explains:

> The Logic of the common good goes something like this: Humans need access to many things to survive and realise their full potential. A good society facilitates universal access to all of those goods—known as the common good. Think about how much one's life would be diminished if one did not have access to a good educational system or if one could not go to hospital when extremely ill or if one did not have access to art or literature or if one lived in a place in which the economy was so underdeveloped that no jobs were available. The common good includes all of these concrete goods plus other 'social conditions' that are conducive to a good human life, including the very existence of a community that provides these goods. It is the responsibility of everyone to build up the common good.[250]

Solidarity and *subsidiarity* are key principles of the Catholic common good tradition. John Paul II defined solidarity as 'a preserving determination to commit oneself to the common good; that is to say to the good of all and of each individual, because we are all really responsible for all.'[251] The related concept of 'subsidiarity' concerns the appropriate division of responsibility for upholding the common good between individuals, local associations, the institutions of civil society and the various levels of government. This principle and the similar Calvinist principle of *sphere sovereignty* are often invoked in connection with the autonomy and competence of sovereign states within the European Union. Pius XI is credited with coining the term—which derives from the Latin root *subsidium* meaning help or assistance—in his 1931 encyclical *Quadragesimo anno.*

Pius XI was troubled by the subsuming of small labour associations, which had been able to accomplish their goals through their own initiative, into less efficient and less socially constructive larger collectives. He taught that it is an injustice, 'a grave evil and a disturbance of right order to assign to a greater and higher association what lesser and subordinate organisations can do.'[252] He also applied this principle to the State which, he argued, 'should let subordinate groups handle matters and concerns of lesser importance which would otherwise dissipate its efforts greatly.'[253] Abraham Lincoln—back in 1854—had much the same idea in mind when he said: 'the legitimate object of government is to do for a community of people whatever they need to have done, but cannot do at all, or cannot do well, for themselves—in their separate and individual capacities. In all that the people can individually do as well for themselves, government ought not to interfere.'[254]

Clearly then, the common good requires that responsibility be devolved to the appropriate level in accordance with the principle of subsidiarity and that the pursuit of self-interest is properly tempered with the virtue of solidarity. The Church, in following her calling to live in solidarity with and for the vulnerable in society, is enabled to promote the common good, since—as we have seen—attention to the plight of the poor provides a litmus test for social justice and indicates the health of public institutions. But how are we to apply these important but apparently

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[250] Vogt, Catholic Social Teaching and Creation, p. 225.

[251] John Paul II, *Solicitudo rei socialis* #38

[252] Pius XI, Quadragesimo anno, #79 http://www.vatican.va/holy_father/pius_xi/encyclicals/documents/hf_p-xi_enc_19310515_quadragesimo-anno_en.html [accessed 19 October 2015]

[253] Pius XI, Quadragesimo anno, #80

[254] Abraham Lincoln, http://quod.lib.umich.edu/l/lincoln/lincoln2/1:261?rgn=div1;view=fulltext [accessed 19 October 2015]; quoted in Thomas Massero S.J., *Living Justice: Catholic Social Teaching in Action* (revised edition) (Lanham MD: Rowman and Littlefield, 2008), p.89.

anthropocentric principles in an age characterised by unprecedented ecological as well as social problems and concerns?

It can be and has been argued that—responding to the ecological crisis as a 'sign of the times'—recent Catholic teaching has evolved, adapting the principles of the common good tradition to meet this new challenge. Dorr argues that 'the official teaching of the Church has failed to move beyond an anthropocentric viewpoint';[255] William French sees a progressive 'greening' of recent papal thought, beginning with the publication in 1987 of John Paul II's encyclical on social concern *Sollicitudo rei socialis*, which on French's analysis 'is the first in the social encyclical tradition to give any sustained attention to ecological issues.'[256] Jame Schaefer critiques the tradition in similar vein:

> Catholic social teaching [on solidarity, subsidiarity and the option for the poor] appear sufficient when focusing on the good of human persons and much can be accomplished when functioning from this anthropocentric perspective. However, are these teachings sufficient when they are exclusively centered on the human common good? Are they too centered on valuing the human intrinsically while only valuing other species and biological systems instrumentally for how they can be used to achieve the human common good? Are these teachings sufficiently relevant to the climate crisis when considering the long-term effect on humans, other species, ecological systems and the biosphere? Are they sufficiently realistic and intellectually honest when recognising that homo sapiens evolved from and with other species over millions of years on a planet that had its beginnings with other planets and solar systems approximately 14 billion years ago and when acknowledging that humans are radically dependent upon other species, ecological systems and the biosphere to sustain our lives and efforts to flourish? Are they sufficiently helpful for dealing with a complicated and seemingly intractable global problem caused by many human-induced sources—the climate crisis?[257]

Her questions are rhetorical; on Schaefer's reading Catholic social teaching is recalcitrantly anthropocentric and to remedy this would require a biocentric reconfiguration of the central principles of the common good tradition. This interpretation of Aquinas is widely shared by theologians and secular philosophers commenting on his work. According to the narrative proposed by this group of scholars, Church teaching is becoming progressively 'greener' as societies have developed towards greater transnational interdependence and the globalisation of both trade relations and ecological problems during the *Anthropocene*: the age in which human impacts have come to dominate the natural environment. According to such scholars, this 'greening of the papacy' is exemplified by an expansion of our concept of the *common good* which has—in the process—become an important concept for addressing global environmental concerns from a Catholic perspective. As Vogt argues:

> A crucial step has been the recognition in Catholic social teaching that a safe and healthy natural environment is an important component of the common good. Every person has the right to live in a place in which the environment has not been degraded, in which people are not exposed to dangerous toxins, and in which clean water is readily available. In addition, every individual and every society has

[255] Dorr, *Option for the Poor and for the Earth*, p. 438.

[256] William French, 'Catholicism and the Common Good of the Biosphere' in: Michael Horace Barnes (ed) *An Ecology of the Spirit: Religious reflections and Environmental Consciousness* (Lanham, M. D: University Press of America, 1994) pp. 185–186; quoted in Charles C. Camosy, 'Intellectual Strangers No More? Peter Singer and Roman Catholicism on Ecological Concern' *Claritas: Journal of Dialogue and Culture* 1:2 (October 2012) pp. 45–70 at p.49. http://docs.lib.purdue.edu/claritas/vol1/iss2/7/ [accessed 19 October 2015].

[257] Schaefer, 'Solidarity, Subsidiarity', pp. 409–410.

> an obligation to promote and protect the vibrant health of the natural environment. The responsibility stems from humans' duty to protect and build up the common good.[258]

On this evolutionary account of Vatican teaching, the concept of the common good has been understood in global terms since *Mater et Magistra* in 1961[259]—in which, Daniel Scheid argues, John XXIII widens the circle of concern to include the plethora of new forms of relationship and interdependence in and between contemporary societies.[260] The US Bishops, according to this narrative, then adopted this understanding of the *universal common good* and applied it to the issue of global environmental problems in *Renewing the Earth*, in which they wrote: 'Some of the gravest environmental problems are clearly global. In this shrinking world everyone is affected and everyone is responsible.'[261] Overall, these scholars conclude, there is a clear trend in recent magisterial teaching towards a larger understanding of the common good as well as the importance of environmental responsibility as an essential element of Catholic commitment to its realisation: both Paul VI in *Populorum progressio*[262] and John Paul II in *Centesimus annus*[263] further expanded the purview of the concept, to include intergenerational justice and to link this specifically to the ecological question. Building on the long tradition of the universal destination of goods—which teaches that the Earth's bounty exists for sustaining life and should be used for the benefit of all—Paul VI and John Paul II insisted that every generation has an obligation to preserve this common patrimony for the benefit of future generations who have equal entitlement to the use of common resources.

More recently still, on Dorr's account, Benedict XVI's approach to the common good of our natural heritage—as Dorr reads him—is more balanced and subtle than that of John Paul II and represents a small step forward in Vatican teaching on the ecological crisis whilst perpetuating the traditional anthropocentric paradigm.[264] Certainly Benedict XVI throughout his pontificate—in his encyclicals and other writings—repeatedly drew attention to the interdependence between human ecology and natural ecology rather than prioritising the former as did his predecessor. During his time in office and before his election to the chair of St Peter, as Dorr notes, it is generally recognised that Benedict XVI was always very concerned about human harm to the environment, deeply committed to raising

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[258] Vogt, 'Catholic Social Teaching and Creation', pp. 227–228.

[259] 'Certainly one of the principal characteristics which seem to be typical of our age is an increase in social relationships, in those mutual ties, that is, which grow daily more numerous and which have led to the introduction of many and varied forms of associations in the lives and activities of citizens, and to their acceptance within our legal framework' John XXIII *Mater et magistra,* 15 May 1961 #59 http://www.vatican.va/holy_father/john_xxiii/encyclicals/documents/hf_j-xxiii_enc_15051961_mater_en.html [accessed 19 October 2015].

[260] Scheid, 'Saint Thomas Aquinas, the Thomistic Tradition and the Cosmic Common Good', p. 140.

[261] USCCB, *Renewing the Earth*, III C; quoted in Vogt, 'Catholic Social Teaching and Creation', p. 226.

[262] 'We are the heirs of earlier generations, and we reap benefits form the efforts of our contemporaries; we are under obligation to all men [sic.] Therefore we cannot disregard the welfare of those who will come after us to increase the human family. The reality of human solidarity brings us not only benefits but also obligations.' Paul VI, *Populorum progression,* 26 March 1967 #17 http://www.vatican.va/holy_father/paul_vi/encyclicals/documents/hf_p-vi_enc_26031967_populorum_en.html [accessed 19 October 2015]

[263] John Paul II, *Centesimus annus* , 1 May 1991, #37 http://www.vatican.va/holy_father/john_paul_ii/encyclicals/documents/hf_jp-ii_enc_01051991_centesimus-annus_en.html [accessed 19 October 2015].

[264] Dorr, *Option for the Poor and for the Earth*, p. 424.

awareness of the urgency of the need to address such problems and promoting ecologically respectful lifestyles.[265]

This narrative of a 'greening of the papacy' begins with the assumption that Aquinas—in following Aristotle and given that both of them lived during a period of history in which it was inconceivable that the activities of humankind could jeopardise ecosystems—understood the notion of the common good in purely anthropocentric terms. However, although—as William French notes—many commentators on Aquinas have focused on one organising principle of Thomas's ethical system: 'the absolute superiority of rational human life over all lesser creatures', [266] nevertheless a growing body of Thomist scholars dispute the characterisation of Aquinas's ethics as anthropocentric, and—on this basis—also dispute readings of the social encyclical tradition as inappropriately human-centred and hence inadequate in the face of the climate crisis.

Certainly, in appealing to the *common good* Aquinas—following Aristotle—recognises the irreducible interdependence of citizens and the importance of just institutions for their mutual thriving: as Daniel Scheid puts it 'individuals cannot flourish whilst the structures of the state crumble around them.'[267] Aquinas believed that humans, as naturally social beings, are created by God to live in societies and that there is a good to human life that cannot be found in isolation from others. This concept can be a useful corrective to modern Western society's overemphasis on individualism, although—as Daniel Scheid notes—Aquinas's communitarianism is not unqualified: he clearly does not mean to valorise a totalitarian state in which the individual is involuntarily sacrificed for the perceived good of others. Scheid proposes that the concept of the common good as used in Catholic social teaching can and should encompass the entire created order[268] yet in his contribution to Tobias Winright's edited collection *Green Discipleship* he does not seem to attribute this view to Aquinas himself[269]—arguing rather that extending our concept of the common good in this way seems reasonable in the light of 'Aquinas's understanding of the importance of biological diversity

[265] Dorr, *Option for the Poor and for the Earth*, p. 424.

[266] Camosy comments that strictly speaking Aquinas elevates the rational creature over the non-rational, with Angels—who also have a rational nature—above humans in his hierarchy of being. Camosy, Intellectual Strangers, p. 61; quoting William French, 'Catholicism and the Common Good of the Biosphere', p. 193.

[267] Daniel Scheid, 'Saint Thomas Aquinas, the Thomistic Tradition and the Cosmic Common Good', p. 140.

[268] 'Our conception of the common good must obviously include the whole biotic community, since the quality and health of human life is integrally tied to the quality and health of the lives of all the other members of the biosphere. There is, after all, only one ecology.' Merle Longwood, 'Common Good and Environmental Issues', *Theological Studies* 34.03 (1973), pp. 468–480; quoted in Daniel Scheid, 'Thomas Aquinas, the Cosmic Common Good & Climate Change', p.125.

[269] 'Aquinas took the term common good from Aristotle, and he likewise limited the common good to the good of the city-state or the nation-state: each citizen was meant to contribute to the state's overall well-being. By appealing to the common good, Aquinas acknowledges the interdependence of people […] In recent years however, many have expanded the concept of the common good and, thus, widened the circle of concern.' Scheid, 'Saint Thomas Aquinas, the Thomistic Tradition and the Cosmic Common Good' p. 140; although Scheid has revised his view on Aquinas, arguing in *Confronting the Climate Crisis* that God as the absolute cosmic common good and the order and diversity of the universe as the temporal common good are key to understanding Aquinas's theology of creation and 'despite a steadfast presumption of humanity's dominion over nature, human superiority is not the only theme in Aquinas's theology of creation. Indeed, multiple passages envision a cosmos in which all creatures, including humans, share a common end of giving glory to God. Though humanity retains a privileged position among creatures, the universe as a whole possesses its own intrinsic goodness and worth.' Daniel Scheid, 'Thomas Aquinas, the Cosmic Common Good & Climate Change', p. 127.

and ecological sustainability and the insights of contemporary science that highlight the interdependence among all earthly creatures'.[270] Scheid notes indications in recent episcopal documents that the idea of a *planetary common good* already influences the bishops' reflections on the climate crisis[271] and, with a broader concept of the *cosmic common good* as his interpretive lens, he faults Benedict XVI for narrowing the focus of his teaching to the *human good*[272] in comparison to his predecessor's occasionally wider ecological vision,[273] which for Scheid suggests quite the opposite conclusion on Benedict XVI's contribution to the general trend of recent papal teaching on the environment compared to the frustratingly slow but otherwise positive historical trajectory detected by Donal Dorr.

Although Scheid does not cite the work of other Thomist scholars such as Celia Deane-Drummond and John Berkman in support of his arguments for a wider understanding of the *cosmic common good*, there is a growing body of academic opinion that commends as authentic a reading of Aquinas's creation theology that embraces an ecological vision of the common good. Celia Deane-Drummond and David Clough critique readings of Aquinas on animals that 'set up certain theologians as instigators and culprits of a negative attitude towards animals'; they suggest that this reinforces the view of some secular philosophers that Christianity's cardinal error has been its assumption that humans are different from animals.[274] Indeed atheist environmentalists commonly fault the entire Judeo-Christian tradition for its supposed anthropocentric focus, and Peter Singer—for egregious example—has said that Thomas Aquinas 'has room only for sins against God, ourselves and our neighbours. There is no possibility of sinning against non-human animals, or against the natural world.'[275] To the contrary—Deane-Drummond insists—notwithstanding the more obvious ethical views towards animals that Aquinas shared with his cultural contemporaries, there is implicit

[270] Scheid, 'Saint Thomas Aquinas, the Thomistic Tradition and the Cosmic Common Good', p. 140.

[271] 'Because human well-being and the health of the planet are intimately linked, the U.S. Catholic bishops and popes have invoked "the common good" when addressing environmental issues. More dramatically, in their 1992 pastoral letter *Renewing the Earth*, the U.S. bishops urge all people to pursue the planetary common good. This document represents one of the first instances in which an episcopal conference has applied common good language to include Earth of which humanity is only one part. The bishops reiterated this language and accorded it a more central position in *Global Climate Change: A Plea for Dialogue, Prudence and the Common Good*. In this document, they call attention to "the universal common good" and its ethical priority when addressing the climate crisis.' Daniel Scheid, Saint Thomas Aquinas, the Thomistic Tradition and the Cosmic Common Good' p. 125; quoting USCCB 1996 *Renewing the Earth*, in: Drew Christiansen S.J. and Walter Grazer eds. *And God Saw That It Was Good* and USCCB 2001 *Global Climate Change: A Plea for Dialogue, Prudence and the Common Good.*

[272] 'Benedict XVI centers his understanding of the common good of the Earth in terms of the impact on human beings, and while he concurs with John Paul's respect for the order of the cosmos, he takes great care to emphasise the importance of human dignity' and 'Benedict XVI exhorts society to exercise a responsible stewardship of creation and to make certain lifestyle changes, but this is done in order to promote integral human development, and to strengthen the bonds of humanity.' Daniel Scheid, 'The Common Good: Human or Cosmic?' In: Ronald A. Simkins and John J. O'Keefe eds. *The Greening of the Papacy, Journal of Religion and Society,* Supplement 9 (2013) pp. 5–15, at pp. 7–8.

[273]'John Paul II focuses most of his attention on how environmental issues affect human beings, yet […] he also leaves some space for a non-human common good. He calls upon people to recognise the "well defined unity and order in the world," and he cites a "duty towards nature and the Creator" as an "essential part" of the Christian faith.' Scheid, The Common Good: Human or Cosmic?, p. 7.

[274] Celia Deane-Drummond and David Clough, 'Introduction' in: Deane-Drummond and Clough (eds.) *Creaturely Theology* (London: SCM Press, 2009), pp. 1–15 at p. 7.

[275] Peter Singer, *Practical Ethics* (Cambridge: Cambridge University Press, 2011), p. 267.

in his thinking a far more sympathetic and sensitive treatment of non-human creatures.'[276] Charles Camosy, drawing on the work of John Berkman in Deane-Drummond and Clough's 2009 edited volume *Creaturely Theology,* argues that Aquinas is a more complex thinker than secular philosophers like Singer have allowed: his concept of the common good does not limit itself to human beings or even to this planet, indeed for Aquinas there is a 'universal common good' which 'employed as a cosmological-ecological principle suggests that all species, including the human, are parts which participate within the greater whole of the universe'[277], hence—despite his assertion of the superiority of rational beings over lesser creatures—for Aquinas God's plan in creation whilst hierarchical is by no means anthropocentric.

Solidarity, Subsidiarity and Sustainability

The key concepts of the common good tradition, *solidarity* as the virtue that predisposes citizens to pursue the common good and *subsidiarity* as the organising principle within society that most efficiently conduces to its realisation, might be expected to have co-evolved with the notion of the *common good* in our age of heightened ecological peril. Hence it is no surprise that scholars who endorse the dominant narrative of a progressive 'greening' of Vatican teaching detect a similar historical trend in the scope of *solidarity* and *subsidiarity* within the common good tradition. Arguably, there has been a movement towards recognition of *sustainability* as an equally essential principle of the common good in Catholic social teaching which is inter-tangled with other social trends that have been reflected on, adapted and taken up into Vatican doctrine over the same period.

Unfortunately, as Dorr notes, every shift in emphasis or direction signalled by the Vatican—however nuanced—becomes contested territory between rival political partisans who mine every new addition to the doctrinal corpus for nuggets in support of their own worldview as well as for evidence of trends they wish to oppose and counteract.[278] At times the threads are genuinely difficult to disentangle—some ecotheologians have attempted to make common cause with feminist or socialist critics of Vatican teaching and indeed these other agendas have been the dominant chords in the thought of some eco-feminist and eco-socialist thinkers—but in principle there is no necessary connection between a worldview that values the natural world as the common patrimony of humankind and radical, revisionist theological agendas within the Church and within the wider political discourse.

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[276] Deane-Drummond and Clough, 'Introduction' p. 7. n. 20; referencing Judith Barad, *Aquinas on the Nature and Treatment of Animals* (San Francisco: Scholars Press, 1995) and Celia Deane-Drummond, *The Ethics of Nature* (Oxford: Blackwell Publishing, 2004) pp. 73–77.

[277] Charles Camosy, Intellectual Strangers No More, pp. 61–62 and n. 76; quoting John Berkman, 'Towards a Thomistic Theology of Animality' in: Deane-Drummond and Clough (eds.) *Creaturely Theology*, p. 24.

[278] 'Precisely because of the great weight given to papal teaching, there have been many attempts by ideologues to "harness" this teaching in support of their own political views. The result is that Catholic social teaching has become a battleground on which the ideological struggle between the right and the left is carried out. It is commonly assumed by the ideologues on both sides that John XXIII and Paul VI were moving the Church to the left while John Paul and Benedict have been seen as swinging it back again to the more traditional conservative position. Quentin Quade, for instance, claimed that Paul VI's Populorum progressio and the documents of the synods of 1971 and 1974 represent a drift away from the mainstream of Catholic social teaching—a drift that was sharply corrected by John Paul II. To sustain such an argument requires a very selective reading of the pope's documents and statements.' Dorr, *Option for the Poor and for the Earth*, p. 449; quoting Quentin L. Quade, (ed.) *The Pope and the Revolution: John Paul II Confronts Liberation Theology* (Washington DC: Ethics and Public Policy Center, 1982).

Historically, the principle of *solidarity* in Catholic social teaching has been closely aligned with the requirement to have a preferential focus on the needs of the most vulnerable; indeed as Dorr construes the concept of this *option for the poor*, solidarity is the virtue essential its implementation as the Church lives out her vocation to stand with and for the poor. As Johan Verstraeten stresses, there is an important dialectic between love and justice: if love 'is the highest and universal criterion of the whole of social ethics', nevertheless it cannot be proclaimed without justice, since to do so would 'make the poor again the objects of paternalistic benevolence and no longer the carriers of inherent rights that must be protected by the state and civil society.' Social ethics cannot be reduced to inter-subjective relationships—an error Verstraeten thinks the *Compendium* falls into—since it is rooted in the longing to live a good life with and for others in the context of just institutions.[279]

Verstraeten discerns a tendency during the pontificate of John Paul II towards what he sees as the subordination of justice to discourse on love and a corresponding reduction of the concept of *solidarity* to mere 'social love'. For Verstraeten, this was consequent upon and indicative of a gain in influence over Catholic social teaching by those with a neo-liberal agenda—although he demonstrates that neither *Centesimus annus* nor the *Compendium of the Social Doctrine of the Church* can truly be said to give an unqualified 'ringing endorsement' of that agenda. Market capitalism is accorded only limited and conditional approval in *Centesimus annus*, remaining firmly subordinate to the universal destination of goods and to the priority of the human person as worker. Verstraeten argues that historically love and justice received more balanced attention in Catholic social teaching: for example, in *Populorum progressio*, solidarity included not only 'love in action' but also 'the aid that richer nations must give to developing nations',[280] whilst 'social justice' was construed as the structural 'rectification of trade relations between strong and weak nations' and as 'equality of opportunity'.[281] However, it should be noted that in *Populorum progressio*, Paul VI—not unlike John Paul II in *Centesimus annus*—gave (suitably qualified) endorsement to market mechanisms, commenting that 'competition should not be eliminated from trade transactions; but it must be kept within limits so that it operates justly and fairly, and thus becomes a truly human endeavour'.

Writing in 2011, Verstraeten argues that Benedict XVI in *Caritas in Veritate* corrects 'the un-nuanced rejection […] of the social assistance state by Pope John Paul II in *Centesimus annus*'. In view of this and of the close connection we have noted between the virtue of solidarity and the doctrine of the preferential option for the poor, it seems remarkable that Dorr nevertheless detects a simultaneous weakening of the motivating passion for giving preference to the vulnerable—which for Dorr can only retain its full meaning, its implications and its challenge as part of a spirituality that values and emphasises the concept of liberation, with its background of social analysis and its overtones of contestation and struggle—during the pontificate of Benedict XVI. In my view there is a danger of over-interpreting differences in style and of mistaking this for differences of substance. As with the data relating to anthropogenic climate change there is also a risk, in focusing on the minutiae, of

[279] Alain Thomasset, *Paul Ricoeur: Une Poétique de la morale*, BETL 124 (Leuven: Peeters University Press, 1996) p. 574; quoted in Johan Verstraeten, 'A Ringing Endorsement of Capitalism? The Influence of the Neo-liberal Agenda on Official Catholic Social Teaching'in: Linda Hogan (ed.) *Applied Ethics in a World Church: The Padua Conference*, (Maryknoll, New York: Orbis Books, 2008) pp. 54–64, at p. 62.

[280] Paul VI, *Populorum progressio* #44.

[281] Paul VI, *Populorum progressio* #61.

misinterpreting the longer-term trends. It is not clear that Benedict XVI can meaningfully be said to be more or less 'conservative' than his predecessor in his approach to social ethics, or that a clear trend in one direction or the other is really discernible between Paul VI and Pope Francis. And, as we have seen, whether or not a progression towards a more ecologically inclusive concept of the *common good* and towards the adoption of criteria of ecological sustainability as essential to *solidarity* and *subsidiarity* can be detected as an underlying trend in Catholic social teaching will depend upon whether Deane-Drummond's controversial reading of Aquinas ultimately seems persuasive.

Dorr, as we have seen, remains dissatisfied with current Vatican teaching on the option for the poor and on the ecological crisis; alongside Drew Christiansen, Jame Schaefer and a host of other voices in Catholic ecotheology he argues for further development of Catholic social teaching away from its anthropocentric roots and towards ecocentricity. Writing back in 1996, Christiansen argued that promoting the common good—properly understood—ought to aim at sustaining and serving the ecological or biotic community as well as humans.[282] Similarly, Schaefer argues for development of the common good tradition towards what she calls 'earth solidarity' which will require:

> […] choosing to make decisions now for the common good of all species, abiota, ecological systems and the biosphere. In the light of the ongoing disruption of the global climate, choosing to make decisions for the good of all will require a change in attitude. [This] requires a conversion from an anthropocentric attitude that they are merely instruments intended for human use to a planetary attitude that prompts us to intrinsically value other species, the air, the land, waters, ecological systems and the biosphere within which all function as contributors to and benefactors of a life-sustaining climate.[283]

Regardless of whether or not one accepts Schaefer's narrative and her consequent call for Catholic conversion from our ignoble history of anthropocentricism, her phrase 'earth solidarity' encapsulates an important concept, weaving ecological concern into Catholic social ethics and linking the conservation agenda to the commitment to live in solidarity with the most vulnerable in the human community as well as to expand our concern to vulnerable others beyond our own species. Perhaps Deane-Drummond would see this as a correction to others' misreading of Thomist theology, but—since this is not the dominant contemporary interpretation of Aquinas—the qualifier is useful in providing a concise label for a Catholic worldview that embraces environmental protection whilst honouring long-standing and treasured principles of natural law and social concern within the Catholic tradition. The idea of 'earth solidarity' or 'integral ecology' seems to me to encapsulate the worldview towards which Germain Grisez's environmentalism strives without really quite reaching. Could 'earth solidarity' be one of those ideas 'whose time has come', which—as victor Hugo famously remarked—no army can withstand?[284]

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[282] Drew Christiansen, 'Ecology and the Common Good: Catholic Social Teaching and Environmental Responsibility' in Drew Christiansen and Walter Grazer, *And God Saw That It Was Good*, (Washington DC: United States Catholic Conference, 1996) p.185; quoted in Vogt, 'Catholic Social Teaching and Creation', pp. 228–229.

[283] Schaefer, 'Solidarity, Subsidiarity', p. 411.

[284] 'One can resist the invasion of armies; one cannot resist the invasion of ideas. " Victor Hugo, *Histoire D'un Crime: Deposition D'un Temain* (Kessinger Publishing, 2010; original published in 1877).

Schaefer sees her larger project, of retrieving and reconstructing medieval and patristic concepts as foundations for environmental ethics, as her contribution to a collective response by theologians to a call from Catholic Bishops to engage with the environmental insights of our tradition and in particular to explore the connections between the duty of stewardship and the dignity of the human person. In 'thinking with the Church' in this way, the theologian may be able to uncover fruitful insights that already exist within the tradition—such as Deane-Drummond's ecological reading of Aquinas—which, once they have been tested and their authenticity established, can provide a more secure foundation for developments in social doctrine than the strident voices of political activism and revisionist theology. Schaefer proposes a critical-creative methodology: critical in examining sources in the light of their intellectual context and recognising the disjuncture with our contemporary worldview, and creative in restructuring their concepts in the light of such cultural barriers to mutual understanding, and hence imagining how they might speak to our context.

Daniel Scheid adopts a similar methodology in reflecting on Aquinas's creation theology; although in his earlier work—as we have seen—Scheid appears to accept the dominant evolutionary view of the *common good* tradition, in his contribution to Schaefer's edited volume *Confronting the Climate Crisis*, Scheid finds warrant within St Thomas's thought, which is foundational for the Catholic tradition, for the idea of *intrinsic goodness* in all God's creatures and for valuing biodiversity as the temporal dimension of the *cosmic common good*.[285] For Scheid, this Thomist understanding suggests that Humans should work to preserve those ecosystems and creatures that add to biodiversity and the sustainability of life on Earth, promoting the flourishing of creatures and the complex networks of interconnections between organisms that grow and thrive in symbiosis and mutual interdependence. He notes the similarity between this Thomist understanding and the US Catholic Bishop's statement that 'the human family is charged with preserving the beauty, diversity and integrity of nature as well as fostering its productivity.'[286] Aquinas—Scheid cautions—would resist the reduction of 'productivity' to economic growth or human consumption; since within his worldview the order of the universe is its greatest attribute, hence humans must take into account the need to preserve the natural order in its diversity and integrity and foster its sustainable fecundity.

> Aquinas gives good reason for saying animals, trees, and so on are intrinsically valuable apart from human use: all creatures are intrinsically good because they have been created and preserved by God; and they have a particular set of attributes by which they may return to God, and fulfilling these inclinations or "appetites" glorifies God. Aquinas also offers a defence of ecological diversity, rooting it not in contemporary concern for endangered species but in a theological interpretation of God's purposes for creation. Aquinas argues that a diversity of creatures with varying inclinations is not only part of God's Eternal Law but also is necessary for the universe to fulfil its purpose of imitating the divine goodness […] 'For goodness, which in God is simple and uniform, in creatures is manifold and divided; and hence the whole universe together participates [in] the divine goodness more perfectly, and represents it better than any single creature'[287]

[285] Daniel Scheid, 'Thomas Aquinas, the Cosmic Common Good & Climate Change' in: Schaefer ed. *Confronting the Climate Crisis*, pp. 125–144.

[286] Daniel Scheid, 'St Thomas Aquinas, the Thomistic Tradition and the Cosmic Common Good', p. 143; quoting United States Catholic Bishops, *Renewing the Earth.*

[287] Daniel Scheid, 'St Thomas Aquinas, the Thomistic Tradition and the Cosmic Common Good', p. 136; quoting St Thomas Aquinas, *ST* I: q. 47, a. 1.

Whilst it is beyond the scope of this thesis to arbitrate between competing scholarly interpretations of Aquinas, the work of Celia Deane-Drummond and Daniel Scheid occasionally departs from the dominant narrative of a greening of the Papacy, indicating an alternative approach that seeks to find resources within the tradition with which to construct a consistent trajectory for possible future doctrinal development. As we have seen, a preoccupation with the issue of anthropocentrism has produced a radically critical strand of ecotheology, but there is room within a broad and inclusive field for a more theologically conservative approach, glimmers of which appear in the writings of a number of Catholic theologians.

Conclusion

Catholic social teaching unfolds as the Church reflects on the signs of the times in continuity with the tradition; calls for a paradigm shift or a new theology more fitting in an age of ecological crisis should therefore be viewed with some suspicion when we seek to predict the likely content of the new environmental encyclical. It may be that Germain Grisez, in defining his project in moral theology as one of 'thinking with the Church' can provide us with insights into environmental ethics that are more illuminating in terms of the likely evolution of Vatican teaching in this field. His understanding of authentic Catholic teaching—as we shall see—is particularly interesting when he treats the secular environmental concept of 'inherent value' in nature as naming a concept inherent in the teaching rather than a break with tradition. If Grisez is able to make this move it seems possible that the Vatican will do likewise at some point in the future. Grisez's work may also provide the key to likely developments on climate change, as the tradition unfolds in our context of ecological concern. Hence this project seeks to recover Grisez's thought on environmental ethics, and proposes the adoption of a Grisez School dialectical methodology, reflecting on our environmental challenges from with the living truths of faith, in search of authentic Catholic responses to the ecological crisis which—in Chapter Two—we have established as a scientific reality and a 'sign of the times'.

Having identified the intellectual lacuna in Catholic ecotheology that this project seeks to fill, we are now in a position to proceed to an examination of Germain Grisez's environmental ethics, the fruit of his conscientious application of this methodology, and to suggest how we might extend his insights and approach to the climate crisis: this will be the task of Chapter Four.

Chapter 4: Germain Grisez—The Forgotten Environmentalist?

Introduction

Having made the case in Chapter three for approaching the ecological challenge from the perspective of the Grisez School, employing a dialectical methodology, my aim in this chapter is threefold. Firstly I shall seek to show that Grisez's theological ethics needs to be read through the lens of his creation theology. This rereading enables the crucial ecological dimension to his natural law theory to come into focus, paving the way for a constructive and previously unexplored engagement with environmental issues from within the existing structures of Catholic moral theology, rather than dependent on a radical restructuring to accommodate the ecological agenda. Secondly I aim to analyse a number of objections to Grisez's ethics that have been raised by his environmentalist critics and to show that these critiques do not have traction against the new natural law when important misunderstandings of Grisez's work have been exposed and corrected. Indeed, substantial common ground can be identified between Grisez and his environmentalist interlocutors at the level of their practical conclusions on conservation issues and central planks of the animal welfare agenda. Thirdly, by applying insights drawn from my study of Grisez's fascinating but widely overlooked environmental ethics, together with established principles of Catholic social teaching, I shall propose a strategy for a Grisez School response to climate change that prioritises fast-track mitigation without sacrificing climate justice outcomes; the chapter will conclude with a reflection on the new environmental encyclical, *Laudato Si'* from a Grisez School perspective.

(1)Grisez's Creation Theology, Environmental Ethics and Natural Law

This section argues that Grisez's creation theology is an important interpretive lens for his natural law ethics, without which his whole project is in danger of being misinterpreted. In order to make this case I shall proceed as follows: Firstly, I shall provide an exposition of Grisez's work on environmental responsibility in volume two of his trilogy *The Way Of the Lord Jesus*: *Living a Christian Life*.[288] Secondly, I shall give an overview of his concept of the vocation of the Church and more specifically that of the moral theologian in contemporary society. Thirdly, I shall sketch out the structural core of the new natural law so that we can see how Grisez's theological ethics relates to his concept of vocation and how the whole scheme fits together into a coherent vision of Christian life and character in the light of his creation theology.

Exposition of Grisez's Creation Theology and Environmental Ethics

Grisez treats work, subhuman realities and property in chapter ten of *Living a Christian Life* and it is important to understand how these topics are interrelated in order to properly appreciate his specific treatment of animals and nature. Grisez's monumental work in theological ethics is encyclopaedic in its scope, but the dangers of reading his treatment of nature without a broader contextual understanding of how this aspect of his work fits into the broader system he articulates cannot be overemphasised. In particular his treatment of work and its relationship to human dignity and dominion and his work on property, which for Grisez is always held subject to the universal destination of goods, contain important resources for environmental as well as social ethics and contain many insights of relevance to an authentic Catholic response to the climate challenge. In this

[288] Germain Grisez, Chapter 10: Work, Subhuman Realities and Property, in: Grisez, *Living a Christian Life*, pp. 753–834.

exposition of Grisez's creation theology I shall summarise the relevant aspects of his treatment of work, subpersonal nature, animals and property.

Work

For Grisez, property has Lockean origins in human work and occupancy, which renders hitherto common natural objects into possession,[289] although he rejects the view that ownership derives entirely from work[290] and does not construe the 'state of nature' as a literal primitive social order in which the material world was jointly owned with each having an equal share.[291] Grisez has a high view of work as a basic human good through which people develop their skills and realise themselves as acting persons.[292] This intrinsic association between work and human dignity is essential to the meaning of good work, although Grisez asserts that those who are unable to work retain full human dignity and can still live worthwhile lives.[293] Grisez warns against the error of economism in which the monetary value of the product is mistaken for the sole value of work[294] and stresses that voluntary service[295] and work within the home[296] are no less valuable for want of remuneration. Good work uses nature to serve human needs within the framework of God's plan[297] and we wield God-given authority over nature to that end alone. There is no licence to exploit or destroy in the dominion mandate as Grisez understands it:[298] we are called to responsible work as our share in God's activity, to continue his work of creation and redemption.[299] All our endeavours

[289] 'God gives the whole human family dominion over subpersonal creation for everyone's reasonable use. People's occupancy of places and uses of things, together with the requirements of fairness, causes many territories and things to become property, that is, to be morally tied in a special way to a particular person, family or other community' Germain Grisez, *Living a Christian Life*, p. 789. c.f. 'Locke believed that private property rights could be established unilaterally, by the initiative of hunters, gatherers, or farmers, quite independently of positive law or social convention. Someone who transforms an object by labour acquires a right to it, Locke believed, and he may then transfer that right to another person by gift or sale, thus initiating a complex economy of natural property rights. The acquisition of such rights is governed by one or two conditions, or 'provisos' as they are sometimes called: the amount initially acquired must be related closely to the labour performed, the acquisition must not lead to waste, and my appropriation of resources must not drastically worsen the position of others.' Jeremy Waldron, 'John Locke', in: David Boucher and Paul Kelly (eds.) *Political Thinkers: From Socrates to the Present* (Oxford: OUP, 2003) Chapter 11, pp. 181–197, at p. 190.

[290] Grisez, *Living a Christian Life*, Chapter 10, QD 1 (b) p. 790, n. 61.

[291] 'The universal destination of goods must be understood rightly: this principle does not mean that in the beginning human persons jointly owned the material world with each having an equal share; no such primitive social order existed.' Grisez, *Living a Christian Life*, Chapter 10, QD 1 (b) p. 790.

[292] Germain Grisez, Chapter 5: The Goods that Fulfil Persons, In: *Grisez, Christian Moral Principles*, pp. 115–140; p.124. See also Grisez, *Living a Christian Life*, Chapter 10, QA 1 (a) p. 756.

[293] 'Because work is so important a part of life, people easily overvalue its significance, and so fail to appreciate the inherent dignity of those who cannot work, while overlooking the ways in which they still can carry on personally fulfilling and socially valuable activities.' Grisez, *Living a Christian Life*, Chapter 10, QA 1 (e) p. 758.

[294] Grisez, *Living a Christian Life*, Chapter 10, QA 3 (a) p. 763 n. 15. Quoting John Paul II, *Laborem exercens* #13, 14 September 1981. http://w2.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf_jp-ii_enc_14091981_laborem-exercens.html [accessed 20 October 2015].

[295] Grisez, *Living a Christian Life*, Chapter 10, QA 2 (i) p. 762.

[296] Grisez, *Living a Christian Life*, Chapter 10, QA 3 (g) p. 766. n. 21; quoting John Paul II, *Laborem exercens* 'due value must be attributed to [a mother's inalienable duties of care and the upbringing of her children] in society for the good of the family and of society.'

[297] Grisez, *Living a Christian Life*, Chapter 10, QB, 2 (e) p. 777.

[298] Grisez, *Living a Christian Life*, Chapter 10, QB, 2 (b) p. 775.

[299] Grisez, *Living a Christian Life*, Chapter 10, QB, 1 (c) p.774; QB, 3 (d) p. 780.

depend on God for their success and our part is to pursue the good by co-operating in our work with God[300] in accordance with the natural law inscribed on all human hearts.

Nature

For Grisez, nature is endowed with intrinsic goodness.[301] Each creature is preserved to meet a particular need and has inalienable meaning and value[302] that should not be abused or disregarded.[303] Good human use of non-human creatures is in accordance with the God-given direction of practical reason and therefore, for Grisez, fulfils and does not conflict with the creature's inherent meaning and value.[304] Natural entities are neither to be exploited or held sacred,[305] but to be used for good human purposes within the limits set by deep respect for creation and the creator.[306] Humans are responsible to God and to each other—not least to future generations—for the use they make of God's gift of nature[307] which in effect we hold on trust for our descendants.[308] For Grisez, our sins—specifically laziness, abuse of power and pursuit of pleasure, wealth, status, power and the illusion of security—are the root causes of ecological devastation.[309]

Grisez condemns unrestricted, exploitative 'development' which leads to irreversible changes in the natural world, depletes resources and involves injustice to the poor.[310] He especially condemns powerful people who 'decide which claims will count as fair and even which individuals will count as persons'[311] and engage in wanton waste and spoliation of the earth, pursuing—at best—the long term interests of themselves and those they care for rather than the common good.[312] However he also points out that romantic environmentalism can be unjust to the poor, hence environmental policy should take into consideration the burdens imposed by job losses and increased costs of necessities such as food, shelter, home heating and transport that disproportionately impact the poor.[313]

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[300] Grisez, *Living a Christian Life*, Chapter 10, QB, 1 (c) p.774.

[301] Grisez, *Living a Christian Life*, Chapter 10, QB, p. 771.

[302] Grisez, *Living a Christian Life*, Chapter 10, QB 1, p. 772.

[303] Grisez, *Living a Christian Life*, Chapter 10, QB 1 (a) p. 772.

[304] Grisez, *Living a Christian Life*, Chapter 10, QB 3 (a) p. 778.

[305] Grisez, *Living a Christian Life*, Chapter 10, QB 1 (a) and (b) p. 772.

[306] Grisez, *Living a Christian Life*, Chapter 10, QB 4 (a) and (b) pp. 780–781.

[307] Grisez, *Living a Christian Life*, Chapter 10, QB 2 (a) p. 775.

[308] Grisez, *Living a Christian Life*, Chapter 10, QB 2 (c) p. 776 n. 40.

[309] Grisez, *Living a Christian Life*, Chapter 10, QB 4 (c) p. 781.

[310] Grisez, *Living a Christian Life*, Chapter 10, QB 1 (a) p. 772.

[311] Grisez, *Living a Christian Life*, Chapter 10, QB 1 (a) p. 773.

[312] Grisez, *Living a Christian Life*, Chapter 10, QB 1 (a) p. 772.

[313] Grisez, *Living a Christian Life*, Chapter 10, QB 1 (b) n. 32; quoting US National Conference of Catholic Bishops, *Renewing the Earth* (14 Nov 1991) p. 426. 'Too often the structure of sacrifice involved in environmental remedies seems to exact a high price from the poor and from workers. Small farmers, industrial workers, lumberjacks, watermen, rubber-tappers, for example, shoulder much of the weight of economic adjustment.'

Grisez draws on three biblical motifs to make the case that there are moral limits to human dominion over nature: the ecologically inclusive Noahic covenant,[314] the prohibition on 'eating the fruit of the tree' as a symbol of moral limits to human licence[315] and the 'Sabbath of the land' allowing fallow periods for the earth to rest and recuperate.[316] Thus he derives norms of reverence for the creator, respect for nature and use of natural entities subject to restraint and reasonableness in pursuit of authentic human development.

Animals

For Grisez, human rights are derived from the concept of human dignity as *imago dei*[317] and rights in this sense cannot be extended to animals. As we have seen, he associates animal rights with a hedonistic consequentialism that does not acknowledge the rights of vulnerable categories of human person such as unborn and neonatal children.[318] Grisez argues that lower animals cannot be fulfilled by sharing in intelligible human goods;[319] lacking 'rights', animals may be killed to put them out of misery (whereas euthanasia is absolutely prohibited)[320] and humans may kill, harm or cause pain to animals in the course of pursuing any good human purpose.[321] Nevertheless, humans do have duties of kindness and care towards animals:[322] cruelty and negligent abuse are prohibited,[323] endangered species should be protected and harmless animals and birds provided for where this

[314] 'The covenant God grants the survivors is inclusive: "I have set my bow in the clouds and it shall be a sign of the covenant between me and the earth" (Gn 9:17)' Grisez, *Living a Christian Life*, Chapter 10, QB 2 (b) p. 775.

[315] 'The limitation imposed from the beginning by the creator himself and expressed symbolically in the prohibition not to "eat of the fruit of the tree" (c.f. Gn 2: 16–17.) shows clearly enough that, when it comes to the natural world, we are subject not only to biological laws but also to moral ones, which cannot be violated with impunity.' Grisez, *Living a Christian Life*, Chapter 10, QB 2 (b) p. 776, n. 38; quoting John Paul II, *Sollicitudo rei socialis*, 34 *AAS* 80 (1988) 560 *OR*, 29 Feb. 1988, 9.

[316] Grisez, *Living a Christian Life*, Chapter 10, QB 2 (e) p. 777–778.

[317] 'According to the Christian view, humans differ from subpersonal creation because God creates them in his own image, which includes the capacities of reason and free choice, and calls them to heavenly communion. Each human individual's fundamental rights necessarily flow from this natural and supernatural dignity, and his or her other rights presuppose it. In other words, the God-given meaning and value of human persons is the source of their fundamental rights and the foundation of any rights they acquire.' Grisez, *Living a Christian Life*, Chapter 10, QC 1 (a) p. 783.

[318] Grisez, *Living a Christian Life*, Chapter 10, QC 1 p. 783.

[319] 'The first principles of practical reason, which underlie all rational motivation and every moral responsibility, direct action only towards intelligible human goods, and lower animals simply cannot be fulfilled by sharing in those goods.' Grisez, *Living a Christian Life*, Chapter 10, QC 1 (c) p. 785.

[320] 'Since animals' lives are not sacred as human life is, and since their suffering cannot have the spiritual and moral meaning human suffering has, they should be killed when necessary to end their misery, unless one has some reason not to do so.' Grisez, *Living a Christian Life*, Chapter 10, QC 2 (b) p. 786.

[321] 'Since animals are part of the subpersonal creation over which humans have dominion, they may be used in any way which truly and justly serves the basic goods of persons. In principle there is nothing wrong with using animals for human food, clothing, shelter, scientific and medical experimentation, ornamentation, art materials, games and sports, religious sacrifice and so forth. Provided animals are used for such a human benefit and the act is not morally wrong on some other ground, a person may kill them, harm them, and/or inflict pain on them to the extent necessary for the purpose or unavoidable without imposing significant burdens on human beings.' Grisez, *Living a Christian Life*, Chapter 10, QC 2 (c) pp. 786–787.

[322] Grisez, *Living a Christian Life*, Chapter 10, QC 2 (b) p. 786.

[323] Although Grisez appears to define 'cruelty' narrowly, as the *senseless* infliction of pain, since he justifies the infliction of pain in the pursuit of basic human goods. Grisez, *Living a Christian Life*, Chapter 10, QC 2 (b) and (c) pp. 786–787.

does not conflict with an overriding human good.[324] Grisez identifies the use of fur as fashion and hunting as a status activity as examples of abuse of animals. However it is important to note that his objection is not to wearing fur or hunting in principle, but to doing so in pursuit of some selfish end rather than in pursuit of real human goods.[325] He cautions against keeping pets without good reason or without giving due consideration to the costs and responsibilities of ownership and the environmental impacts associated with domestic animals.[326] Acceptable reasons for keeping pets, for Grisez, include teaching children, companionship for the lonely or self-development through training and caring for animals.[327] Vegetarianism, for Grisez, is commendable but not obligatory. Bad practices in animal husbandry, human health considerations of a meat-rich diet and the implications for food security of the use of agricultural land and grain for pasture and animal feed are considerations relevant to Christian moral choices concerning meat consumption.[328]

Property

The doctrine of the universal destination of goods is key to understanding Grisez's treatment of questions relating to property:[329] God has destined the earth and all it contains for the use of all human individuals and peoples in such a way that under the direction of justice accompanied by charity goods ought to flow abundantly to everyone on a fair basis.[330] In the light of this, no one has absolute entitlement to his own property, to use or abuse as he chooses. Property owners have a

[324] Grisez, *Living a Christian Life*, Chapter 10, QC 2 (b) p. 786.

[325] 'It is an abuse of animals when a woman wears a fur coat for the sake of vain and ostentatious display rather than for its suitability as clothing or a man hunts and kills wild animals for mere self-magnification, not for food or even sport involving real skill and, perhaps, fellowship.' Grisez, *Living a Christian Life*, Chapter 10, QC 2 (c) p. 787.

[326] Grisez, *Living a Christian Life*, Chapter 10, QC 3 (b) p. 788.

[327] Grisez, *Living a Christian Life*, Chapter 10, QC 3 (a) p. 787.

[328] 'Some of the feeding and slaughter of animals for meat misuses them because that meat is not part of a healthy diet and/or because the agricultural capacity used in producing meat could be used more efficiently to provide more people with an adequate vegetarian diet.' Grisez, *Living a Christian Life*, Chapter 10, QC 2 (c) p. 787. 'Since Scripture, tradition and the magisterium provide no basis for the thesis that vegetarianism is obligatory, arguments for that position originate from other sources. Some arguments begin from true premises but do not validly establish the position. For instance, vegetarians often point out morally indefensible practices in raising, handling and slaughtering animals but those practices can be reformed without imposing vegetarianism on human beings. Again, health considerations and the conservation of natural resources support restrictions, perhaps severe ones, on the use of animals for food, but do not exclude it entirely. Other arguments avoid logical fallacies but presuppose animal rights or some other premise at odds with Christian faith as a basis for an absolute norm excluding eating meat.' Grisez, *Living a Christian Life*, Chapter 10, QC 2 (c), p. 787. n. 54.

[329] 'Property ownership always remains subordinate to the more basic truth that humankind as a whole receives all material goods from God as a gift' Grisez, *Living a Christian Life*, Chapter 10, QD 1 p. 789.

[330] 'God has destined the earth and all it contains for the use of all human individuals and peoples, in such a way that, under the direction of justice accompanied by charity, created goods ought to flow abundantly to everyone on a fair basis. One must always bear this universal destination of goods in mind, no matter what forms property may take as it is adapted, in accordance with diverse and changeable circumstances, to the legitimate institutions of peoples.' *Gaudium et spes* #69. Grisez, *Living a Christian Life*, Chapter 10, QD 1 (a) p.789.

duty to care for and conserve their property and having met their own needs and those of their dependants to use it to meet the needs of others.[331]

It follows from this that on occasions there may be a duty to forego material goods to which one is legally entitled[332] or to use one's possessions to benefit others in ways to which they have no legal right. It also follows that where private owners act against the common good in their use of their property it's expropriation by the state may be justified and in some cases Grisez holds that even confiscation without compensation may be warranted or, if the full value of the property reflects in part the expectation of unjust profits to be made from its exploitation, a fair level of compensation may be less than the market price.[333]

In particular, the universal destination of goods encodes an absolute duty to feed those dying of hunger, since—as St Ambrose said—'if you have not fed them you have killed them.'[334] Grisez is clear that this is a requirement of justice and is not a supererogatory act for the Christian.[335] Needs arising from some sin or defect in one's own community deserve special consideration even if one has done all one could to prevent the injustice that inflicted the hardship.[336] For Grisez, both direct action to aid particular people in need and socio-political action to address structural injustices that cause human misery are requirements of the Christian life.[337] Within the parish or neighbourhood, Grisez endorses the practice of lending and borrowing, recommending social cooperation in maintaining a catalogue of possessions that parishioners or neighbours are prepared to loan to others.[338] But although Grisez clearly rejects the harsh individualism of unfettered capitalism, he retains a role for just private ownership[339] and the administration of capital for the common good through responsible private business ownership[340] and ethical investment.[341]

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[331] 'The Church teaches that ownership always presupposes and is limited by the universal destination of goods, that is, by the fact that the material world is God's gift to humankind as a whole. Owning property means being responsible for the care and management of part of this gift. People do not have the right to do as they please with their property; they cannot assume that what they own is theirs to keep indefinitely and use just as they like, provided only they pay their taxes and do no harm to others. Rather, every owner has a constant, serious responsibility to make certain his or her property fairly serves genuine human needs. Having satisfied their own needs and those of their dependents, owners should do what they can to meet the needs of others. Consequently, under certain conditions almsgiving is so grave an obligation in strict justice that failure to feed the hungry can be a form of homicide.' Grisez, *Living a Christian Life*, Chapter 10, QE 1 (a) p. 800.

[332] For example, sometimes owners should not reclaim property which had been stolen from them and sold to an innocent third party whose need is great, although the law allows them to do so. Grisez, *Living a Christian Life*, Chapter 10, QE 5 (g) p. 814.

[333] Grisez, *Living a Christian Life*, Chapter 10, QD 2 (e) and (f) p. 795.

[334] Grisez, *Living a Christian Life*, Chapter 10, QD 1 (d) p. 791.

[335] Grisez, *Living a Christian Life*, Chapter 10, QE 5 (b) p. 811.

[336] Grisez, *Living a Christian Life*, Chapter 10, QE 5 (c) p. 812.

[337] Grisez, *Living a Christian Life*, Chapter 10, QE 5 (d) p. 813.

[338] Grisez, *Living a Christian Life*, Chapter 10, QE 3 (e) p. 808.

[339] Grisez, *Living a Christian Life*, Chapter 10, QD 2 pp.792–795.

[340] 'People with both surplus wealth and skill in management can rightly set up or invest in businesses which provide just wages for gainful work and useful goods and services at fair prices, along with enough profit to compensate them reasonably for their work, which contributes to society's economic common good.' Grisez, *Living a Christian Life*, Chapter 10, QE 5 (f) p 814.

It follows from Grisez's understanding of the universal destination of goods that Christians living in wasteful, materialistic, individualist cultures are called to witness to their faith by adopting a less material way of life.[342] Grisez comments that most Christians overlook this duty and the gravity of our responsibilities to share[343] and conserve[344] are seldom appreciated, adding that:

> Considering what is now known about the environmental impact of many activities, the harm a person does to others by maintaining a wasteful consumerist style of life can no longer be judged insignificant as it once was. Even if particular instances do little harm the choice—and so the moral responsibility—usually does not concern those individual instances, since they result from the habits and policies of one's style of life. In view of the harm done to others resulting from one's whole way of life, the choice not to undertake the practice of conservation and change one's habits can hardly be a light matter.[345]

Grisez attributes our materialist 'throw-away' culture to radical dissatisfaction that arises when we try to find fulfilment through satisfaction of desires—often stimulated by advertising—that can never be assuaged by ownership of more and more material goods.[346] In acquiring property, the Christian should be careful to purchase only those things necessary to discharge the responsibilities

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[341] 'In investing savings, one must consider potential return and be careful about safety, so as to serve the purpose which justifies using money in this way rather than in meeting someone's more or less urgent present needs. However, one should also try to avoid turning over the management of one's savings to people who will use them in unjust or otherwise immoral activities, and should try instead to invest in something morally acceptable.' Grisez, *Living a Christian Life*, Chapter 10, QE 6 (e) p. 817.

[342] 'The essential conditions for human life on earth would suffer irreparable damage if everyone consumed and polluted at the same rate as people living in the wealthier nations do. Therefore "those who are already rich are bound to accept a less material way of life, with less waste, in order to avoid the destruction of the heritage which they are obliged by absolute justice to share with all other members of the human race."' Grisez, *Living a Christian Life*, Chapter 10, QE 1 (c) p. 802; quoting Synod of Bishops, Second General Assembly (1971) *Justice in the World* EV 4 (1971–73) 834–835, Flannery, 2:709.

[343] 'To refuse to help others in need is to evict God's merciful love from one's heart and so to abide in that death which precludes eternal life' Grisez, *Living a Christian Life*, Chapter 10, QE 1 (a) p. 801.

[344] 'As for the practice of conservation, classical moral theology never discussed it; few Catholics feel a moral obligation in this matter, and some dismiss it as a merely fashionable cause. The norm may seem rather puritanical, because the Catholic moral and ascetical tradition does not regard the exuberant and even lavish use of material goods as wrong in itself. Also, some leading conservationists are secular humanists, whose erroneous views on other matters diminish the credibility of their sound moral judgements and policy proposals on this matter. Even when Catholics recognise their duty to practice conservation, they, like other people, are likely to ignore its seriousness.' Grisez, *Living a Christian Life*, Chapter 10, QE 1 (d) p.803.

[345] Grisez, *Living a Christian Life*, Chapter 10, QD 4 p. 799.

[346] 'Christians need not reject new technology or forgo improved facilities which really enable them better to fulfil their responsibilities. But they must not become "slaves of possession and of immediate gratification, with no other horizon than the multiplication or continual replacement of the things already owned with others still better. This is the so-called civilisation of consumption or consumerism, which involves so much throwing-away and waste. An object already owned but now superseded by something better is discarded, with no thought of its possible lasting value in itself, nor of some other human being who is poorer. All of us experience firsthand the sad effects of this blind submission to pure consumerism: in the first place a crass materialism, and at the same time a *radical dissatisfaction*, because one quickly learns—unless one is shielded from the flood of publicity and the ceaseless and tempting offers of products—that the more one possesses the more one wants, while deeper aspirations remain unsatisfied and perhaps even stifled.' Grisez, *Living a Christian Life*, Chapter 10, QE 2 (b) pp. 804–805; quoting John Paul II, *Sollicitudo rei socialis*, 28; see Drew Christiansen, S.J., 'Social Justice and Consumerism in the Thought of Pope John Paul II' *Social Thought*, Spring–Summer 1987, pp. 60–73.

of her vocation.[347] She should also consider all the on-going costs and responsibilities of ownership[348] and the side-effects of one's use of the property,[349] including the environmental consequences of petrol and electricity use.[350] The latter requirement is relaxed slightly by considerations of affordability for the poor, with wealthier people and nations held to stricter account for mitigation of environmental impacts.[351] The Christian obligation to conserve leads Grisez to endorse the reuse of items where possible, donation for use by others, recycling and salvaging of parts, composting of organic material and careful disposal of other waste.

To sum up Grisez's position on property: Natural entities are rendered into possession through human work and occupancy; the Church recognises both public and private property. However—since wealth and property are not goods intrinsic to persons—there is no absolute right to ownership nor does possession licence irresponsible use of property. In addition to the norms that apply to human use of natural entities—reverence for the creator, respect for the inherent meaning and value of the thing itself, and the duty to use things with restraint for good and reasonable human purposes—private property is to be shared, conserved and used responsibly for the common good and is always held subject to the universal destination of goods and the strict obligation in justice to aid the destitute.

As this exposition of his theological treatment of work, nature and property clearly shows, Grisez expounds a balanced and well developed Christian environmental ethics and this sensitivity to our duties to the creator and his creation pervades and underpins his position on work and property. This observation leads me to the hypothesis that his treatment of the environment is no mere optional appendix to his theological ethics, but an essential element of a holistic appreciation of Grisez. As I hope to show in my next section, this profoundly creation-centred orientation can also be seen in Grisez's understanding of the mission of the Church and the vocation of the moral theologian, providing additional evidence for my thesis. Furthermore, given that work is one of the basic human goods for Grisez and friendship with the creator God is an aspect of human flourishing, the ecological dimension of work and vocation imports Grisez's environmentalism into the heart of

[347] 'Vocation must not be understood narrowly or individualistically; it extends to the whole of life, including such matters as friendships and legitimate recreation, and it specifies all the individual and social responsibilities of a Christian. Therefore, to devote material goods to the service of Jesus' kingdom means acquiring, using and retaining them precisely insofar as they are necessary for survival or are suitable for fulfilling responsibilities pertaining to one's personal vocation.' Grisez, *Living a Christian Life*, Chapter 10, QE 2 (b) p. 804.

[348] Grisez, *Living a Christian Life*, Chapter 10, QE 3 (a) p. 806.

[349] Grisez, *Living a Christian Life*, Chapter 10, QE 3 (c) p. 807.

[350] 'Where the impact is on others, the question is whether the harm can be accepted fairly. For example, using amplifiers and speakers to play music can disturb others who do not wish to be disturbed; using poisons around the house and garden can endanger neighbours' children and pets; using gasoline and electricity usually has a negative environmental impact. Sometimes the use is fair despite the side effects, and other times the activity can be modified to prevent or sufficiently mitigate them; but sometimes one should forgo the use to avoid them.' Grisez, *Living a Christian Life*, Chapter 10, QE 5 (i) p. 815.

[351] 'Although, to avoid severe environmental damage, some things should no longer be manufactured or brought into use, the cost of replacing similar things already in use may warrant continuing to accept their bad effects on the environment. Again, because poor individuals and societies have fewer alternatives, they may rightly accept side effects wrong for the wealthy to accept. Thus the affluent should willingly accept greater burdens in preventing and correcting pollution, rather than favouring measures which overburden the poor by imposing identical burdens on rich and poor alike.' Grisez, *Living a Christian Life*, Chapter 10, QE 5 (i) p.815.

his theological ethics. I shall therefore briefly discuss the structural core of Grisez's natural law theory in order to make my central argument: that Grisez School ethics as a whole needs to be read through the lens of his creation theology and in that light it can be seen to be an ethics of integral ecology.

The Mission of the Church and the vocation of the moral theologian

For Grisez, personal vocation is key to the life of the faithful and each Christian is called by name for a unique task through which she participates in the apostolate, the activity of the Church directed towards carrying out her mission. Chapter thirty-one of *Christian Moral Principles* and chapter two of *Living a Christian Life*, provide an extended treatment of this subject, connecting the sacrament of confirmation[352] and the infused virtue of hope[353] respectively to the concept of personal calling. Further insights into the connections Grisez draws between vocation and redemption can be gleaned from chapter twenty-three of *Christian Moral Principles,* which concerns God's redemptive work in the lives of Christians;[354] chapter twenty-seven—on life transformed by the modes of Christian response—explains how Grisez's theological ethics shapes and is shaped by personal vocation.[355] And chapter twenty-eight, on the practicability of Christian morality addresses the question of how commitment to one's personal calling promotes growth towards perfection.[356]

For Grisez, a Christian's whole life should be apostolic, integrating all activities—domestic, professional, social and technical—with religious values, which should direct everything to the kingdom.[357] The Christian moral life is organised according to the individual's personal calling, hence an irreducible ecological dimension to Grisez's concepts of vocation and apostolate implicates the whole of his moral theology in his ecological vision, such that no Christian life could be divorced from creation care without doing violence to its organising principle.

The key ecological point to draw from Grisez's theological ethics in relation to the integral role of moral works in living a Christian life is the cosmic breadth encompassed by the Catholic vision of the elements of the temporal order that belong to the fullness of human persons, the subject matter of human moral action. As Grisez explains:

> Human persons complete one another in various forms of society and are fulfilled by work and culture. Indeed, 'man in the entirety of his being' refers also to the surrounding cosmos, for people cannot live without the natural world, in which humankind dwells as in a womb. Thus everything else in visible creation pertains to human beings and their salvation would be incomplete were not all things brought back to God in Jesus. John Paul II's statement also indicates the precise way in which the Church's mission includes all the dimensions of persons. The Church becomes concerned with all the elements of the temporal order, which have their own value as created goods, insofar as they pertain to the

[352] Grisez, *Christian Moral Principles*, Chapter 31: Confirmation, the Apostolate and Personal Vocation pp. 749–764.

[353] Grisez, *Living a Christian Life*, Chapter 2: Hope, Apostolate and Personal Vocation. pp. 77–129.

[354] Grisez, *Christian Moral Principles*, Chapter 23: God's Redemptive Work in the Lives of Christians, pp 551–572.

[355] Grisez, *Christian Moral Principles*, Chapter 27: Life Formed by the Modes of Christian Response. pp. 661–682.

[356] Grisez, *Christian Moral Principles*, Chapter 28: The Practicability of Christian Morality. pp. 683–703.

[357] Grisez, *Living a Christian Life*, Chapter 2, QD 1 (b) p. 105.

> fulfilment of human persons and so are destined for a place in the kingdom where all goods will be restored to God in Jesus.[358]

This statement hangs on an understanding of basic elements of Grisez's eschatology and his creation theology which underpin his concept of flourishing and the inherent value of creation respectively. Although precisely how subpersonal creation will exist in the eschaton remains mysterious on Grisez's account, the theological proposition that all of nature will share in redemption is confirmed as a revealed truth of scripture 'for in Jesus all things are to be saved and reintegrated to form new heavens and a new earth'.[359] Grisez's understanding of the mechanism by which all good things are to be restored to God in Christ involves active participation by Christians in the renewal of the created order. The eschatological restoration will not happen automatically, Grisez tells us, but requires our commitment to deal with nature according to God's plan, working towards transforming it from divine gift to humanised asset perfectly linked to the human person and suitable to be offered back to God as part of the fulfilled creation. Grisez's creation theology proposes inherent value on the basis of scriptural evidence that God creates all his works in wisdom and loves everything he makes and furthermore in the biblical creation story God looked on his pre-human creation and declared it good, before he made mankind. Grisez concludes from this that non-human nature has value in itself and is not merely valuable as instrumental to human purposes.[360] As I have shown in the previous section of this chapter, a broad appreciation of Grisez's creation theology in the context of his thought on work and property is necessary to understanding his environmental ethics. Furthermore, the argument of this section is that Grisez's cosmic eschatology is key to interpreting his thought on mission and vocation as integrally ecological. Given the connections Grisez draws between vocation and moral action this provides further evidence to support my thesis that his theological ethics can only be fully appreciated when viewed through the interpretive lens of his integral ecology.

What Grisez seems to be saying is, firstly, that moral action is integral to the mission of the Church and to the particular vocations of individual Christians—their portion of the collective mission—and, secondly, that the eschatological goal of fulfilment in Christ is ecologically inclusive since the whole created order has inherent value as God's good creation and therefore must be included within the scope of 'all goods' that will be subject to eschatological restoration to the Father in the Son. It seems apparent then, that the theological concept of flourishing for Grisez is an ecologically holistic notion. Once this point has been clarified it seems to me that it is no longer possible to read any part of Grisez's theological ethics without perceiving its inherent ecological implications: the hermeneutic of his missiology together with his theology of work, creation and property provide a binocular focus that reveals a thoroughly green theological ethics.

Grisez understands his own academic vocation as a faithful response to the second Vatican council's prescription for renewal in moral theology. It therefore seems highly significant that he prefaces two of the three volumes of his systematic moral theology, *Living a Christian Life* and *Difficult Moral Questions*, with the same quotation from paragraph 38 and 39 of the Vatican II document *Gaudium et Spes,* and also comments on paragraph 39 in the prologue to *Christian Moral Principles*. The passage in question reflects on the eschatological 'new earth and new heaven' in which the good

[358] Grisez, *Living a Christian Life*, p. 104.

[359] Grisez, *Living a Christian Life*, p. 780; quoting Eph 1: 9-10; Col 1: 19-20; 2Pt 3: 13; cf. Rv 21: 1-5; GS 39

[360] Grisez, *Living a Christian Life*, Chapter 10 QB 1 p. 772.

fruits of our nature and effort will be 'cleansed of all dirt, lit up and transformed, when Christ gives back to the Father an eternal and universal kingdom'.[361] In a document noted for the paucity of its ecological content, it is interesting that the paragraph Grisez singles out as centrally significant for his work cautions that the temporal and the eternal need to be kept in balance in the Christian life and reminds us that 'the expectation of a new earth ought not to dampen but rather to enkindle our concern for cultivating this earth.' Grisez clearly has this passage in mind in his discussion of the Church's mission and the role of the natural world in salvation, since he refers to paragraph 39 as authority for his assertion that all the elements of the temporal order 'are destined for a place in the kingdom, where all goods will be restored to God in Jesus.'[362]

Precisely because this passage from *Gaudium et Spes* is identified by Grisez himself as the cornerstone of his whole project, his reflections on the passage elsewhere in his work are likely to be the fruit of much reflection and cannot be dismissed as anomalous in the context of his larger work. It therefore seems reasonable to argue that interpretations that overlook the ecological boundaries within which Grisez constructs his natural law ethics seriously misconstrue his moral theology. That this reading of Grisez is novel and significant is evident from a lack of engagement by the Grisez School in ethical analysis of contemporary ecological challenges and—as we shall see later in this chapter—from the misinterpretation of his work by environmentalist scholars. Disciples and critics alike appear to share the assumption that Grisez's ethics is irrelevant or even inherently inhospitable to ecological engagement. This thesis challenges this assumption, opening up new vistas for what may be an important conversation between environmentalists and conservative Catholic disciples of Germain Grisez.

Integral ecology and the new natural law

Having looked at Grisez's ecological ethics in the context of his theology of work and property and the ecological sensitivity integral to his eschatology, his missiology and his thought on personal vocation, it remains to analyse the integral ecology within his overall natural law ethics in order to substantiate my thesis that the substructure of Grisez School ethics is irreducibly ecological. In order to make this case I shall first present an exposition of the structural core of the new natural law, followed by a discussion of the ecological implications of key pillars of the theory.

The structural core of Grisez School ethics

This summary of the structural elements of the new natural law aims to address three questions central to the Grisez School's proposed reconstruction of natural law: Why is a reconstruction of natural law needed? What are the goals of the moral life and how shall we choose and act in order to direct our moral lives to these ends?

Over the years, Grisez and his team of collaborators have produced various formulations of their theory. The account that follows draws on an article by Grisez, Finnis and Boyle, which Biggar and Black describe as 'the most philosophically precise account of their mature work',[363] fleshed out where necessary with reference to Finnis's *Natural Law and Natural Rights* and *Fundamentals of Ethics* and Grisez's *Christian Moral Principles*.

[361] *Gaudium et spes*, #39.

[362] Grisez, *Living a Christian Life*, Chapter 2 QC 2 (c) p. 104.

[363] Rufus Black, 'Introduction', in: Biggar and Black (eds.) *The Revival of Natural Law*, 1–25, p. 1.

Why is a new natural law needed?

Our first question—why was there a need for a reconstruction or revival of natural law?—relates to the history of theological ethics and the part that Grisez's work has played in its unfolding. The perceived need for a new version of natural law arose, for Grisez, in response to discernment within the Catholic Church of substantial and logical inadequacies in classical articulations of the theory. For two decades—beginning in 1977 and culminating in the publication in three volumes of his *magnum opus*, *The Way of the Lord Jesus*—Grisez's life and work was structured around his vocation as a theological ethicist to answer Vatican II's call for renewal in moral theology.[364] Grisez's new natural law theory aims to provide a philosophically coherent and theologically cogent framework for moral reasoning that will assist people to live life to the full in community with others. Grisez critiques Scholastic versions of natural law as over-focused on heaven and hell—and hence inadequate in providing guidance on the meaning and value of the present life—as well as essentialist, legalistic, static in character and lacking a positive vision of how to respond morally to the unfolding of new possibilities for human fulfilment.

Even more significant for Grisez than this list of flaws in classical accounts of natural law is what he calls the 'logically illicit step' of deriving normative conclusions from factual premises. The necessity of reconstructing natural law to avoid this logical error is a key conceptual presupposition of Grisez School ethics. Their solution to the naturalistic fallacy represents one philosophically coherent approach to this problem and is founded on the distinction they make between theoretical and practical reason and their careful articulation of the relationship between the two. For Grisez, theoretical reason establishes the truth of a proposition by testing it's conformity to some prior reality through inductive or deductive reasoning. By contrast, practical reason is intelligence applied to propositions for action that will bring a new reality into being; it is reason applied to the exercise of free choice. That human beings are capable of such choice is—on their own account—perhaps the most important conceptual presupposition of the Grisez School's ethical framework,[365] since they hold it to be significantly constitutive both of personal character and of human fulfilment.[366]

So in answer to our question 'why is a new natural law needed' the Grisez School response is that older manifestations of the natural law tradition were compromised and inadequate, a problem that had been discerned by the Church, who challenged theological ethicists to respond to the resulting moral lacuna. Taking up this challenge Germain Grisez dedicated his life and work as a moral theologian to constructing the theoretical framework of the new natural law.

What goals should we pursue?

Grisez School ethics provides a two-fold response to our second question: what goals should we pursue in the moral life? On their account, we should pursue intelligible human goods—the dimensions of human flourishing—both for the sake of flourishing itself and in the process to promote good character development. For Grisez, as for Stanley Hauerwas, virtues and vices are considered to be the residue of one's previous acts as the predisposition to engage in further acts similar in moral quality to those which established the disposition through habituation.[367] Thus there

[364] Nigel Biggar and Rufus Black 'Preface', in: Biggar and Black (eds.) *The Revival of Natural Law*, p. xvi.

[365] Germain Grisez, Joseph Boyle and John Finnis, 'Practical Principles, Moral Truth and Ultimate Ends', p. 100.

[366] Black, 'Introduction', p. 4.

[367] Grisez, *Christian Moral Principles*, Chapter 2, QI 1 p. 58. Cf. Stanley Hauerwas, *Character and the Christian Life: A Study in Theological Ethics*, (Notre Dame, Indiana: University of Notre Dame Press, 2009), p. 71.

is a reciprocal relationship between character and conduct: how one behaves is constitutive of character as well as promoting or impeding the actualisation of human flourishing. If we want to act well and promote positive development of our character by entrenching the disposition to act well, we need to have some substantive notion of what human flourishing entails, so that we can choose to act consistently with the pursuit of flourishing. If we interrogate our own actions and those of others, we find that there exists a set of goals towards which human behaviour is ultimately directed, and from this more general set we can identify those that can be described as 'basic intelligible goods.' *Physical pleasure*, although it is frequently the object of human desire is not amongst the Grisez School list of goods, on grounds that it is a sensory and not an intelligible goal and lacks the requisite connection to human flourishing. It is important to note, however, that the pursuit of genuine human fulfilment can be pleasurable, for example: spending time in the company of friends is usually accompanied by warm feelings and developing skill in playing the violin brings pleasurable feelings of accomplishment and aesthetic appreciation. *Autonomy* or freedom is another potential candidate for the list that is rejected by the Grisez School, in this case because it is a prerequisite of the moral life rather than a good to be pursued by persons already endowed with autonomy in moral decision making.

Finnis suggests a list of seven basic goods: life and procreation, knowledge, some degree of excellence in work and play, aesthetic experience, sociability or friendship, practical reasonableness and religion.[368] These goods are basic in the sense that they provide reasons for acting that require no further explanation, for example a decision to go out with friends requires no more ultimate explanation than the pursuit of friendship itself; it is self-evident to anyone who has experienced friendship that its pursuit fosters human flourishing. For the Grisez School the goods are pre-moral: since they provide a general explanation of reasons people have for acting, the pursuit of these same goods is frequently the motive behind behaviour that is immoral. Biggar and Black cite the example of a terrorist who chooses evil means to a good end, believing that bombing civilians will achieve justice for his oppressed people. Social justice is a constituent of Finnis's good of sociability or friendship, but the fact that it can be pursued through destructive violence with disregard for the lives of innocent people demonstrates that it is a pre-moral good: intending a good outcome—even if its achievement through evil means is certain—does not make the action itself moral for the Grisez School. A further feature of the goods is that they are incommensurable and non-hierarchical: they cannot be ranked or compared, since each is a distinct reason for acting and there is no more basic value to act as common coinage to trade them against each other. For example, there is no reason intrinsic to the goods themselves to choose to stay in and study—in pursuit of the good of knowledge—rather than to spend time in the company of friends. Some extrinsic consideration is required—in this case consideration of how best to balance vocational and social goals within a suite of personal commitments. It is an important feature of Grisez School ethics that this requirement of balancing admits of plural moral judgements, depending not only on the personal vocation of the agent but also by the community and culture that shape the particularity of lives embedded in social structures. As Biggar and Black explain:

> This is an important feature to highlight, because claims for a set of goods can appear to express a questionable Enlightenment universalism. In the case of the Grisez School, the combination of the diversity of goods, their incommensurability and their non-hierarchical relationship provides both an explanation of cultural diversity and a strong basis for affirming its value. […] contrary to many

[368] Finnis, *Natural Law and Natural Rights*, pp. 59–99.

> perceptions of natural law theory, this new account provides a basis for explaining and affirming moral diversity, rather than a target for it. Nevertheless, alongside its valuing of cultural diversity, the theory retains a capacity to provide a universal moral critique of extreme behaviour or cultural practices such as genocide, apartheid or female circumcision.[369]

The science of anthropology—as Biggar and Black point out—compares the behaviours of different peoples and cultures and is theoretically predicated on the existence of some account of basic human goods that are capable of being pursued in culturally diverse ways: without such an account the behaviour of people in other societies would be literally inexplicable.

Finnis considers his proposed list of goods as open to modification, but on the basis of his own reflection it seems to him that these seven goods are all the basic goals of human action and that any other purpose which you or I might recognise and pursue will turn out to represent or consist of some aspect of some or all of them. Indeed, as Sabina Alkire's careful analysis and comparison of different accounts of the dimensions of human flourishing shows, there does seem to be substantial empirical evidence for a surprisingly extensive cross-cultural consensus on the basic human goods.[370]

So the Grisez School response to our second question 'what goals should we pursue in the moral life' is that we should act for basic intelligible human goods in pursuit of flourishing—as reasoning social beings—and in so doing we should also pursue self-improvement, aiming to conform our character ever more closely to the ideal of Christian virtue.

How should we choose and act?

The third question we need to address to complete our exposition of the structural core of Grisez School ethics is: how should we make choices in acting for the goods we have identified? The Grisez School system of natural law takes as its self-evident first principle St Thomas's dictum '*Bonum est faciendum et prosequendum, et malum vitandum*' (the good is to be done and pursued and evil avoided). For Aquinas the good simply is that which all things pursue, hence—on Grisez's interpretation—this is the first principle of practical reasoning itself.[371] Every creature in so far as its environment allows, naturally unfolds its development towards full flourishing as a member of its natural kind. Our own species—endowed with natural capacities for free choice and rational self-direction—is uniquely able to participate in the Divine plan through intelligent and active pursuit of the dimensions of our own flourishing. The Grisez School formulate the first principle of morality as:

> In voluntarily acting for human goods and avoiding what is opposed to them, one ought to choose and otherwise will those and only those possibilities whose willing is compatible with a will towards integral human fulfilment.[372]

For both Grisez and Finnis, being moral equates to being completely practically reasonable in making decisions about how to pursue human fulfilment although they provide different accounts of how this overall requirement translates into normative injunctions.

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[369] Rufus Black, 'Introduction' p. 10 n. 42.

[370] Sabina Alkire, 'The Basic Dimensions of Human Flourishing: A Comparison of Accounts', in: Nigel Biggar and Rufus Black (eds.) *The Revival of Natural Law*, pp. 73–110.

[371] This interpretation of Aquinas is contested; see for example Henry Veatch, 'Review of *Natural Law and Natural Rights* by John Finnis', *American Journal of Jurisprudence*, 26 (1981) pp. 247–259.

[372] Grisez, *Christian Moral Principles*, p. 184.

Requirements of practical reasonableness

For Finnis, practical reasonableness is both a constituent of human flourishing and the mechanism by which it is to be pursued. Practical reasonableness is realised in persons who have the good fortune to be accorded the freedom to shape their own lives and the wisdom and virtue to invest their opportunities in the constructive pursuit of goods that—as we have seen—collectively delineate contours of the flourishing life. Finnis's 'requirements of practical reasonableness' spell out the logical consequences of a commitment to the pursuit of happiness guided by intelligent reflection on options for action; he begins his reflection on moral reason by agreeing with John Rawls that every mature person should formulate a rational plan of life. This creates a framework of commitment to a harmonious set of purposes and orientations that organise practical choices towards becoming the person one aspires to be. In the light of our finite life-span and the broad horizons of our freedom, some general commitments and projects—formulated in light of personal preferences, talents and circumstances—are necessary to give our lives focus and direction. However, Finnis takes issue with Rawls's 'thin' theory of the good which treats only liberty, opportunity, wealth and self-respect as primary goods in the interests of democratic impartiality between differing comprehensive doctrines or conceptions of the good life: Finnis's second requirement is that the agent should not arbitrarily exclude any basic good from his moral deliberation, since full flourishing requires the harmonious pursuit of all the basic goods. A coherent life-plan may include focus on particular goods at the expense of others, but the decision to close off opportunities for flourishing should not be arbitrary but rationally chosen.

For Finnis—as for Rawls—participation in some form of social contract is integral to human flourishing and hence practical reasonableness requires that one should show no partiality between persons in pursuing the goods. Finnis compares this third requirement to the Golden Rule, to the Kantian principle that moral judgements be universalisable and to Rawls's heuristic device of the 'veil of ignorance' behind which contracting parties in the original position choose fair terms of engagement with others in founding a society.

In order to pursue a rational plan of life in the midst of uncertainties beyond one's control, some degree of flexibility is required to make the most of opportunities that arise and to weather the collapse of projects to which one had committed time and energy. However given the costs involved in rethinking objectives, retraining and diverting energies into some other life-plan, it would not be reasonable to abandon long-term commitments on a whim. Hence Finnis's fourth and fifth requirements are that we should pursue our projects with reasonable detachment and commitment.

We should adopt efficient strategies for achieving our objectives to avoid wasting effort and opportunity. For Finnis, consequentialist analysis—which he rejects as an overall mechanism for moral reasoning—is nevertheless relevant to this sixth requirement of practical reasonableness. However the seventh requirement—that one should respect every basic good in every act—prohibits the pursuit of good consequences through evil means and gives Finnis's natural law its standing as a bulwark against those species of consequentialism that would deny all moral absolutes in the face of sufficiently dire consequences. Finnis compares this requirement to Kant's categorical imperative.

Underpinning most of our concrete moral duties is the requirement that we should foster the common good of our communities, Finnis's eighth requirement. Finally, since the moral life for Finnis is the rational pursuit of flourishing, one must act in accordance with conscience understood as the

conscious fruits of moral deliberation. The nine requirements of practical reasoning organise and direct the moral life; the person who conscientiously strives to live according to these principles aspires to live a good life and to the extent that she succeeds constitutes her own character as a wise and virtuous person capable of being salt and light in a fallen world. Finnis tells us that 'each of the requirements can be thought of as a mode of moral obligation or responsibility' alluding to Grisez's formulation of the principles of the moral life as modes of responsibility and response to the Christian calling.

Modes of Responsibility and Response

For Grisez, the first principle of morality needs further specification to give us a set of requirements for a moral life; he advocates eight such intermediate principles which he calls 'modes of responsibility'. Each mode 'excludes a certain unreasonable way of willing, a particular way of acting which is inconsistent with a will towards integral human fulfilment.'[373] A theme running through Grisez's eight modes is the variety of ways in which our emotional lives can betray us into acting against the intelligible goods that constitute real human flourishing. However the aim of the moral life is not to extinguish or ignore our emotional life but to restrain and discipline its destructive excesses as the process of sanctification moves us closer to the alignment between desire and duty characteristic of the virtuous.

The Christian 'modes of response' are—for Grisez—'ways of acting characteristic of a person whose will, enlivened by charity, is directed in hope towards the fulfilment of everything in Jesus'.[374] They are faith's specification and charity's fulfilment of the eight modes of responsibility, which forbid that which is incompatible with a will toward integral human fulfilment. These principles of the Christian life are more like blessings than demands, since the grace of God which reveals them also leads the Christian to conform his will to their fulfilment. Each mode of response corresponds to one of the Beatitudes proclaimed by Christ in his Sermon on the Mount, the virtues Jesus identified as traits of the blessed transform the dry bones of the modes of responsibility into the living flesh of the Christian moral life in response to God's calling.

So in answer to our third question 'how should we pursue flourishing' the Grisez School respond that we should discern our individual vocation—in secular terms 'formulate a rational plan of life'—and structure our lives through this overall commitment. In the light of this framework for personal discipleship, we should reflect conscientiously before acting and choose only those options that are 'practically reasonable' which is to say those options that are compatible with a will towards flourishing and with our vocational commitments.

Integral ecology

This thesis argues that Germain Grisez's theological ethics is shot through with ecological sensitivity such that to ignore his environmental strands of thought is to misconstrue his whole project in moral theology. To make my case for this conclusion I have shown how, in situating his teaching on sub-human nature within his broader discussion of work and property ethics, Grisez articulates an authentically Catholic and integrally ecological concept of human responsibilities and dominion over nature in our capacities as workers and property owners. I have also shown that Grisez's eschatology as well as his teaching on mission and vocation is ecologically inclusive, exhorting all Christians to

[373] Grisez, *Christian Moral Principles*, p. 205.

[374] Grisez, *Christian Moral Principles*, p. 653.

discern their own unique calling within the collective task of the Church: to share the Gospel, serve human persons and cultivate this earth through acts of charity in anticipation of the day when the whole of creation will be freed from slavery to vanity, when Christ gives back to the Father an eternal and universal kingdom. It remains to demonstrate that the new natural law is itself inherently ecological; in order to make my case I shall begin with the connections between vocation and practical reasonableness, followed by a discussion of the ecological implications of pursuing the basic human goods and the disputed potential for the revival of natural law to speak to our situation of ecological crisis.

Finnis's first requirement of practical reasonableness is that every agent should adopt a rational plan of life. As we have seen this secular formulation mirrors Grisez's theological exhortation to the faithful to discern our personal vocation, through which we will participate in Christ's work of redemption, in the light of our talents and opportunities. For both Finnis and Grisez, the moral life is structured by an overarching vocational commitment: If—like Grisez—I am called to undertake the task of moral theologian as my role and service to the Church, the whole of my moral life is constructed around this framework. This has implications for my acquisition and use of property since—as we have seen—reasonable ownership is limited to that which is either necessary for life and health or suited to my vocational role. It has implications for work and training: under the umbrella of my vocational commitment, I must exercise environmental responsibility and work for the common good in collaboration with other people of good will within the community delineated by our shared vocation. And it has implications for every choice I make in the exercise of my freedom and responsibility as the organising principle of my moral life. If practical reasonableness itself and the basic intelligible goods I am pursuing have an ecological dimension, as I hope to show, the moral life cannot but walk in lock-step with environmental values.

If my vocation—and every other plan of life open to human choice—has an element of environmental responsibility built into its very foundations in this way, and vocational commitment is the cornerstone of participation in the moral life, it seems reasonable to conclude that the substructure of Grisez School ethics is integrally ecological. However it seems to me that not only the foundations but also the pillars and arches of the new natural law are green to the core: Each of the basic goods has its ecological dimension. *Life and procreation* are ecologically dependent: to ensure the preservation of this good for the benefit of future generations it is essential that we respect the natural limits of the system that supports human life and fertility. The possibility of pursuing *knowledge* of other species and ecosystems will be curtailed if we do not act to preserve biodiversity. *Work and play*—as we have seen—have built-in environmental responsibility requirements; aesthetic experience is frequently sought and found in the beautiful forms in nature (as Finnis himself asserts in *Natural Law and Natural Rights*).[375] *Friendship and sociability* require other-centeredness and respect for the common good including its ecological dimension. *Practical reasonableness* presupposes all the virtues, including moderation in the consumption and use of natural entities and authentic *religion* requires respect for the creator and commitment to responsible exercise of human dominion over the natural world. Sabina Alkire recommends the addition of a separate dimension of flourishing that she calls 'harmony with the natural world' to Finnis's list of basic goods, but she acknowledges the ecological implications of the existing dimensions:

[375] Finnis, *Natural Law and Natural Rights*, p. 87.

> Nussbaum proposes 'being able to live with concern for and in relation to animals, plants and the world of nature as a basic capability. Is this a basic reason distinct from those already discussed? Part of the value of harmony with the non-human environment is aesthetic—for example the beauty of crashing waves or of a soaring heron. Part of the value of the environment to people is that it provides life—nourishment and security—and is also instrumental to work and leisure. Part of the value of animals is instrumental, if they are for food or work or security and ones relationship to domestic animals also partakes in a limited way of the value of friendship. Part of being at harmony with nature is very much like being at harmony with a greater-than-human source of meaning and value—and indeed Finnis earlier described this dimension as 'harmony between oneself and the wider reaches of reality'. Nevertheless, I would propose harmony with the natural world as a distinct reason for action since it is not reducible to the other aspects of human relatedness, i.e. harmony between all the dimensions within the self, with other people and with God.[376]

Having argued that for the Grisez School the concepts of mission and vocation, the requirements of practical reasonableness and the basic dimensions of the flourishing life all reveal an authentic Catholic integral ecology, it remains to ask whether the overarching approach adopted in Grisez's reconstruction of natural law theory is hospitable to the environmental agenda. Michael Northcott, having argued in *The Environment and Christian Ethics* that a suitably modified form of the theory could be pressed into service in relation to environmental ethics, retracted this in his paper 'The Moral Standing of Nature and the New Natural Law' for Biggar and Black's collection of essays. Northcott argued there that 'the Grisez-Finnis restatement of the natural law tradition is more flawed than I earlier proposed, and in particular that their uniquely modern reconceptualization of natural law in deontological terms seriously disables the tradition as a vehicle for establishing the moral standing of nature and the duties we owe to the natural world.' Northcott and others argue that a naturalist, Thomist reconstruction of natural law is required to overcome the flaws in Grisez School ethics as a conceptual framework for ecological values. My next section analyses the arguments of Grisez's environmentalist critics. Discussion of whether and how a more traditional Thomist natural law theory might rise from the ashes of scholasticism in the light of the fact-value distinction, and whether this might be a more fruitful approach for ecological engagement is deferred to chapter five.

(2) Conflict and common ground with Environmentalists

There have been few recent attempts to relate natural law theory to environmental ethics.[377] James Nash[378] advocates the idea of 'ecosystem compatibility' as an important moral norm and a corrective to what he sees as 'the serious ecological deficiencies in the natural law tradition'; he cites Robert George's edited collection *Natural Law Theory: Contemporary Essays*[379] as evidence that natural law is not merely an historical curio but shows signs of recovery in contemporary legal philosophy.

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[376] Alkire, 'The Basic Dimensions of Human Flourishing', p. 98.

[377] For some earlier proposals for the ecological reinterpretation of natural law see: Scott Buchanan, *Natural Law and Teleology* pp. 140–153; Robert Gordis, *Natural Law and Religion* pp. 265–270 in: *Natural Law and Modern Society* ed. by John Cogley and others (Cleveland; World Publishing Company, 1962).

[378] James A. Nash, 'Seeking Moral Norms in Nature: Natural Law and Ecological Responsibility' in: *Christianity and Ecology: Seeking the Well-being of Earth and Humans*, ed. by Dieter T. Hessel and Rosemary Radford Ruether (Cambridge, MA: Harvard University Press, 2000), pp. 227–250; see also Christina Traina's response to Nash in the same volume: Christina L. Traina, 'Response to James A. Nash', pp. 251–260; see also James A. Nash, *Loving Nature: Ecological Integrity and Christian Responsibility* (Nashville; Abington Press, 1991).

[379] Robert George, *Natural Law Theory: Contemporary Essays* (Oxford, Clarendon Press, 1992).

However his essay does not engage seriously with the Grisez School or attempt to apply their methodology to environmental ethics. Michael Northcott—as we have seen—commends the Finnis-Grisez theory as a resource for environmental ethics in *The Environment and Christian Ethics*,[380] but repudiates this in a later article, in which he dismisses Grisez's work as incapable of 'ecological repristination' because it comprises 'a restatement of classic Christian anthropocentricism, which has traditionally involved the exaltation of the theme of dominion over other themes which also find Biblical warrant—such as those of stewardship, asceticism, and community between nature and humans'.[381] Donnelly and Bishop also see the scope for ecological recovery of the new natural law as limited, since for them the theory's anthropocentricism means that it 'can provide a strong rationale for environmental protection [only] so long as specifically human goods are at stake';[382] they look to other versions of Thomism for a philosophical defence of biocentric principles. My aim in this section is to explore the conflict and common ground between Grisez and his environmentalist critics, to make the case that the flaws in Grisez's articulation of Christian environmental responsibility are less pervasive than his critics have supposed and that the extent of their common agenda is more promising for future engagement. In pursuit of this aim I shall analyse and critique Michael Northcott's position and that of Donnelly and Bishop on Grisez School environmentalism.

Michael Northcott

Michael Northcott poses a serious challenge to the whole project of ecological engagement with Grisez's work and identifies aspects of Grisez's position on animal rights as particularly problematic. It is worth giving careful consideration to Northcott's critique, in view of which I quote at length from his 2000 article 'The Moral Standing of Nature and the New Natural Law':

> Grisez's position is a restatement of classic Christian anthropocentricism, which has traditionally involved the exaltation of the theme of dominion over other themes which also find Biblical warrant — such as those of stewardship, asceticism and community between nature and humans. Lynn White was the first among many scholars to draw attention to this anthropocentricism in the origins of the current global crisis of the environment. Despite Grisez's principal qualification of this position (that sub-personal creatures have God-given inherent value) his approach gives weak moral grounds for ascribing weight to the inherent value of nature independently of human needs. Therefore it gives insufficient support to attempts by lawyers, philosophers and citizens to resist the ecological depredations of corporations and governments through economic developments that are said to meet human needs. While Grisez might concede that, in particular cases such as the Sierra Nevada or Sarawak, clear-cutting forests to feed the human demand for paper and plywood is not a reasonable use of nature, his insistence that the ultimate good of trees is dependent on their potential for use by (redeemed) persons prevents their being granted the moral and legal standing for the general regulation of such use.
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> The weakness of Grisez's position from an environmental perspective is even more clearly manifest in his treatment of the status of animals. He begins by dismissing the concept of animal rights, arguing that their ascription to animals undermines their ascription to humans since animals have no sense of moral obligation and cannot therefore share moral status analogous to that of persons. The priority in the consideration of the treatment of animals is therefore the needs of persons, and not of animals

[380] Michael Northcott, *The Environment and Christian Ethics* (Cambridge; Cambridge University Press, 1992).

[381] Michael Northcott, 'The Moral Standing of Nature and the New Natural Law', in: Nigel Biggar and Rufus Black (eds.) *The Revival of Natural Law* pp. 262–281, p. 268.

[382] Bebhinn Donnelly and Patrick Bishop, 'Natural Law and Ecocentrism', *Journal of Environmental Law* 19.1 (2007), pp. 89–101.

> themselves. Although they are part of God's good creation, cruelty towards them is intrinsically bad only when this treatment does not clearly serve human benefit: 'it is cruel to cause animals pain by misusing them for activities which serve no basic good of persons, for example purported experiments which offer no reasonable prospect of advancing scientific knowledge.' However the clear implication is that it is not cruel to cause animals pain when there is such a prospect. The reason why pain has no determinate moral significance for animals as it does for humans is because 'animals' lives are 'not sacred as human life is' and hence 'their suffering cannot have the spiritual and moral meaning human suffering has'.[383]

As can clearly be seen from my exposition of Grisez's environmental ethics, Northcott's dismissal of the new natural law as destructively 'anthropocentric' is too sweeping. Whilst Grisez's animal ethics is open to the charge of anthropocentricism, his overall ecological consciousness is more nuanced; his acknowledgment of the inherent meaning and value of pre-human creation is much more significant than Northcott allows and the inherent ecological dimension of Grisez's concept of human flourishing in addition to his explicit teaching on immoral models of development—both of which Northcott overlooks—contradicts Northcott's suggestion that his ethics could be used to justify ecological destruction on grounds that economic development meets human needs.

Grisez asserts that the wrong use of natural things not only impedes the true fulfilment of their human abuser but also harms the thing itself since, rather than fulfilling its divinely given potentialities:

> Immoral use always partly displaces and blocks their fulfilment. Thus because the bad human act conflicts with the God-given direction of practical reason, it violates the subpersonal creature's inherent meaning and value. If the action is morally bad, culture damages nature as devastation replaces the wilderness, for in this case bad human acts fail to cooperate with and complete God's creative work.[384]

Grisez seems here to be advocating a biocentric view: that human abuse of natural entities is wrong because it violates their inherent value and obstructs the fulfilment of their God-given potential. In addition he is scathing in his critique of ecologically destructive models of development which he attributes to an atheist worldview that regards nature as nothing more than material for exploitation:

> This irreligious view provides a rationale for treating nature without piety, that is, without limits grounded in deep respect for subhuman things. Development then means unrestricted exploitation, which leads to irreversible changes in the natural world and tends to exhaust natural resources. Yet many people pursue this sort of development without recognising any limit except self-interest, which, at best, embraces the long-term interests of themselves and those they care for. As they treat the world without reverence towards God the creator, those enjoying the fruits of such development are further enriched and the poor further impoverished.[385]

Furthermore, Grisez does not defend an unfettered concept of dominion[386] as Northcott suggests; he clearly argues that human dominion over nature is not to be seen as unrestricted power but as

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[383] Northcott, 'Moral Standing of Nature', p. 269.

[384] Grisez, *Living a Christian Life*, Chapter 10, QB 3 (b) p. 779.

[385] Grisez, *Living a Christian Life*, Chapter 10, QB 1 (a) p. 772.

[386] 'The divine mandate to have dominion by no means authorises people to do whatever they please with God's good and beautiful subhuman creatures. John Paul II points out three ecological considerations: the need to take into account each thing's nature and place in the cosmos, the limits and non-renewability of

exercise of responsibility within a community of creatures and limited by moral norms.[387] Morally acceptable human use of nature, for Grisez, is restricted to the reasonable pursuit of sustainable development, in the context of a proper respect for the creator God, for the inherent meaning and value of all God's beloved creatures and for the integrity of creation itself, which God gives not to individual humans, or to collectives such as the corporations and governments Northcott accuses of ecological depredations, but to all of us in perpetuity as the common patrimony of humankind.

It is not at all clear why Northcott concludes that Christopher Stone's thesis[388] — that the rights of natural entities might be recognised using the legal fiction of personhood that was created to attribute responsibility collectively to bodies such as trusts, corporations or public institutions — might be undermined by Grisez's theological argument that the ultimate eschatological good of trees is dependent on their use and appreciation by redeemed persons. For Grisez, it is clear that all of nature is to share in redemption, although 'precisely how subpersonal creation will exist in the kingdom remains mysterious.'[389] But since he argues that Christians should help to liberate and renew subpersonal creation, his moral theology would seem to provide encouragement for Christian environmentalism and resistance to ecological depredation, whereas his denial of 'rights' for animals and other natural entities on a metaphysical level does not affect the technical mechanisms discussed by Stone and others as possibilities for extending legal protection to trees, since such legal mechanisms do not require the recognition of any actual moral rights for the entity concerned.

For the purposes of this chapter the key point on the issue of animal liberation is that Northcott correctly identifies a serious problem with Grisez's position on cruelty to animals. It is difficult to avoid the implication in Grisez's brief discussion of medical experimentation that it is not only acceptable but somehow 'not cruel' to cause suffering to animals in experiments that hold out legitimate hope of improving medical provision for human patients. He seems in danger at this point of slipping into a consequentialist justification of cruelty and his denial of 'rights' to animals removes the buttress he builds against such arguments in relation to cruel treatment of human subjects where the interests of others are at stake. However Northcott misreads Grisez's argument for denying the existence of 'animal rights': Grisez does not argue that animals cannot share moral status analogous to that of persons since they have no sense of moral obligation. Indeed Grisez could not hold such a position and coherently argue for the full personhood of human embryos and senile or seriously mentally disabled human persons. What Grisez actually asserts is that human beings by and large lack any 'common sense' intuition that they themselves have moral obligations towards animals such as 'rats and skunks'.[390] Grisez's argument at this point is not persuasive; it

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natural resources, and the impact of some kinds of development on the quality of human life. Then he teaches: "The dominion granted to man by the creator is not an absolute power, nor can we speak of a freedom to use and misuse, or to dispose of things as one pleases. The limitations imposed from the beginning by the creator himself and expressed symbolically by the prohibition not to "eat of the fruit of the tree" shows clearly enough that, when it comes to the natural world we are subject not only to biological laws but also to moral ones which cannot be violated with impunity." ' Grisez, *Living a Christian Life*, pp. 775–776; referencing Thomas F. Dailey OSFS 'Creation and Ecology: The Dominion of Biblical Anthropology', *Irish Theological Quarterly*, 58 (1992) pp. 1–13 and citing John Paul II *Sollicitudo Rei Socialis*, 9.

[387] Grisez, *Living a Christian Life*, p. 775.

[388] Christopher Stone, *Should Trees Have Standing?: Towards Legal Rights for Natural Objects* (Los Altos, California: William Kaufman, 1974).

[389] Grisez, *Living a Christian Life*, Chapter 10, QB, 3 (c) p. 780.

[390] Grisez, *Living a Christian Life*, Chapter 10, QC 1 (b) p. 784.

seems detached from—even arguably in conflict with—his hallmark natural law approach, which in other contexts seeks to replace commonly held but uncritical views with informed moral deliberation,[391] but Northcott does not address this issue.

Northcott also misrepresents Grisez's argument in such a way as to suggest a callous and speciesist disregard for animal suffering. To the contrary, Grisez's comment that 'animal suffering cannot have the spiritual and moral meaning human suffering has'[392] is made in the context of advocating that suffering animals should be killed where necessary to end their misery, whereas the sacredness of human life and the spiritual and moral meaning of human suffering implies, for Grisez, that euthanasia is never to be countenanced. Northcott quotes this out of context as the rationale for Grisez's position on the pursuit of scientific and medical knowledge through experiments that cause suffering in animal subjects. In fact, for Grisez, pain has no 'determinate moral significance' for animals or for persons; frequently the right thing for a human to do is not that which produces the least pain. But deliberately to inflict pain on another human being without consent or to benefit another would transgress justice and 'human rights' requirements which Grisez's system does not extend to animals. However such an extension would be completely compatible with Grisez's worldview and would bring his currently ambivalent position on cruelty into alignment with his broadly compassionate and ecologically informed environmental ethics.

In summary, I submit that Michael Northcott overlooks the biocentric elements of Grisez's thought, overemphasising the anthropocentricism he associates with the idea of dominion and the pursuit of human goods. On my reading, Grisez's environmental ethics is much more nuanced than Northcott allows, giving no warrant to abuse that obstructs the God given purpose, meaning and value of God's nonhuman creatures and criticising both destructive models of development and an unfettered construction of the biblical concept of dominion. The idea of giving legal standing to natural entities—whether through Stone's legal personhood construction or Mary Christina Wood's proposal that the environment be construed as a trust held for the benefit of future generations—seems to me to be in no way obstructed by Grisez's anthropocentricism. Northcott's objections to Grisez's animal ethics are based on a misreading of his position, but they alert us to real problems with Grisez's reasons for rejecting animal rights and his treatment of cruelty.

Donnelly and Bishop

Donnelly and Bishop focus on a dispute between Robert George and Jeffrey Goldsworthy as to whether a concept of 'good' is distinguishable from the pursuit of specifically human wellbeing.[393] In context, George is defending the natural law position that the intelligible point of moral behaviour is the pursuit of human flourishing. Goldsworthy disputes this, using environmentalism as an example: 'some environmentalists value nature for its own sake and say that its conservation is good independently of its effect on the wellbeing of people or even of other creatures [hence] it is not

[391] For example, on the issue of domestic animals Grisez notes: 'Most people do not think there is any moral issue in having domestic animals, and Christians have accepted the common view uncritically. But the matter calls for a conscientious judgement, which often should be negative.' (Grisez, *Living a Christian Life*, Chapter 10, QC 3 p. 787).

[392] Grisez, *Living a Christian Life*, Chapter 10, QC 2 (b) p. 786.

[393] Robert George, *In Defence of Natural Law*, Chapter 1: A Defence of the New Natural Law Theory, pp. 17–30.

necessary that people believe that something is good for someone in order to believe they have a reason for action.'[394]

It is important to note that the dispute here is not fundamentally about environmentalism; it is about whether an act can be good without contributing to human wellbeing. In 'Fact and Value in the New Natural Law Theory',[395] Goldsworthy proposes a non-cognitivist critique of the Grisez School theory, to which George is responding in the essay cited by Donnelly and Bishop. George's comment, which they construe as asserting that ecocentrism is 'the fruit of emotion or ideology rather than reason or [...] a covert appeal to certain aspects of human wellbeing served by a healthy natural environment' is taken out of context by Donnelly and Bishop.[396] Here is Robert George's point in full:

> It is apparently psychologically possible for people to value nature apart from its value to human beings. This does not however mean that action to preserve the non-human world other than for the sake of human values has an intelligible point. On the contrary, valuing nature in this way can only be accounted for as expressive of a purely emotional attachment or some sort of non-rational faith or ideology. Environmentalism has its rational appeal because people grasp the value for themselves and others (including members of future generations) of preserving nature. Unsurprisingly, environmentalists' arguments characteristically appeal to human values: possible damage to human health, the potential loss for science and aesthetic experience, injustice to future generations and so forth. In any event I do not see how anyone who, laying these considerations aside, fails to see the value of environmental preservation as good-in-itself and thus providing a non-instrumental reason for action, could justly be accused of a failure of practical *reason*. More to the point, the fact that some people, whatever their subjective motivation, value nature apart from its value to human beings does not entail that specifically human values lack an intelligible point and must similarly be accounted for as merely expressive of feeling or desires.[397]

Clearly, George is attempting to defend his natural law methodology, not stating the Grisez School position on environmentalism. In fact, as I have shown in the previous section of this chapter, for Grisez, not only is human wellbeing inseparable from considerations of ecological sustainability, he goes beyond anthropocentricism in acknowledging inherent meaning and value in pre-human creation and advocating respect for creation as an aspect of proper piety in the Christian life. Whilst the list of arguments that appeal to human values given by George as illustrative examples in the above quote is limited to anthropocentric human concerns, an exhaustive list of possible examples of the pursuit of human goods that would provide intelligible reasons for environmentalism, for Grisez—and presumably also for George—would include the good of participating in a relationship with God which for Grisez would also include conscientiously living a Christian life, of which respect for the inherent value of God's creation is an integral part. Donnelly and Bishop argue that:

> In the classical natural law formulation human fulfilment cannot be realised by advancing only those capabilities that secure a benefit for us. Rather to ensure that we are aiming fully towards the completion of our being we need to pursue all the qualities that go, most essentially, to making us human. In turn, part of what does make us human is the capacity not only to advance our own ends but

[394] Jeffery Goldsworthy (1996) 'Fact and value in the New Natural Law Theory', *American Journal of Jurisprudence,* 41 (1996) pp. 21–61, at p. 24.

[395] Jeffery Goldsworthy, 'Fact and value in the New Natural Law Theory'.

[396] Donnelly and Bishop, *Natural Law and Ecocentrism.*

[397] George, *In Defence of Natural Law*, p. 22.

> also to appreciate that other entities have ends that may sometimes have a value that is worth pursuing for its own sake [...] the ability to perceive and to understand that other creatures have ends is part of what it means to be human.[398]

It seems to me that there is nothing in this statement that the Grisez School would find objectionable or outside the bounds of their own conception of the moral life. Grisez argues for kindness to sentient animals, on the basis of their capacity for suffering and with no human advantage in view; he advocates human action to provide for harmless creatures and to conserve biodiversity, and he construes such actions as intelligible, in terms of his understanding of natural law morality, as requirements of the pursuit of right relationship with the creator God, an aspect of human flourishing. So although Donnelly and Bishop are correct in stating that 'in the new natural law scheme we are not afforded the opportunity to ask whether there can be a reason for human action not connected to what is good for human beings'[399] Grisez's concept of what is good for human beings cannot be equated with the selfish pursuit of human desires and preferences but goes beyond anthropocentric human benefits to embrace a larger view of what is 'good for us' as social animals in a dependent relationship with the ecosystem and with the creator God who loves all his creatures and calls us to care for his world.

In summary, Grisez's environmentalist critics appear to overlook the substantial and valuable contribution to the field that Grisez articulates as an inherent part of his vision of the Christian moral life. Although Nash's suggestion that a specific ecological dimension be added to the natural law conception of flourishing could be usefully incorporated into Grisez's secular formulation of his ethics, it is clear that his moral theology includes a concept of inherent value and God-given meaning and purpose for natural entities that human beings should respect and even actively facilitate where possible, and his concept of 'flourishing' presupposes the limitations on human preference-satisfaction imposed by ecosystem sustainability and the right of future generations to share in the ecological inheritance of God's gift of creation. Northcott's critique too quickly dismisses the biocentric facets of Grisez's environmental ethics, overlooking the ecological dimension to Grisez's concept of flourishing as well as his critique of unsustainable development. Northcott's charge that Grisez's ethics overemphasises 'dominion' and misconstrues this biblical doctrine in the ecologically destructive manner identified by Lynn White is simply mistaken, and although he is correct in pointing out Grisez's ambivalence on the subject of cruelty to animals he misconstrues Grisez's rationale for the position he adopts and misreads his argument for the conceptual rejection of animal rights. Donnelly and Bishop make a false distinction between Grisez School ethics and other species of Thomism and base their conclusions on Grisez's environmentalism on a single paragraph from George's work that is taken completely out of context. I would conclude therefore that, notwithstanding these three environmentalist critiques, there is much to be gained through an ecological engagement with Grisez's ethics and the fact that both environmentalists and members of the Grisez School appear to have overlooked this aspect of his work does violence to a full appreciation of his legacy in respect of both his natural law and his Catholic ecological consciousness.

[398] Donnelly and Bishop, 'Natural Law and Ecocentrism', p. 8.

[399] Donnelly and Bishop, 'Natural Law and Ecocentrism', p. 4.

(3) A Grisez School Approach to the Climate Challenge

The aim of this section is to draw out the aspects of Grisez's theological ethics that are specifically relevant to the climate challenge[400] and hence to construct a concept of climate justice and a response to the new environmental encyclical *Laudato Si'* from a Grisez School perspective. Elsewhere I have reviewed one influential American contribution to the pre-Copenhagen climate debate, arguing that a natural rights perspective would be a more appropriate construction of the proposed climate treaty, which Posner and Weisbach construe as a legal instrument for the creation of a public good. I shall not rehearse the details of Posner and Weisbach's argument here except in so far as is necessary to make my case. I shall argue that Grisez's ethics confirm two of the three central claims of the climate justice movement that these authors dispute: that poor nations should not have to spend as much on emissions reductions as rich countries, that differentiated historical responsibility creates an obligation on Annex-I countries to take the lead, and that emissions permits should be allocated on a per-capita basis not grandfathered to existing emitters. This section concludes with a reflection on *Laudato Si'* from a Grisez School perspective.

Posner and Weisbach

On the first issue, the question of differential burden sharing, Posner and Weisbach argue that claims based on redistributive justice are potentially in conflict with the imperative of agreeing a deal that will achieve the desired climate outcome. Furthermore, if wealthy nations agree to an abatement regime that is more ambitious than would be optimal on a cost-benefit analysis, this would have the consequence of redistributing wealth to the most vulnerable states, many of which are poor, but would be an inefficient and poorly targeted mechanism if redistribution were the desired outcome. And—crucially—if wealthy nations scale back their emissions whilst major emitters in the developing world do little or nothing, costs would escalate and the prospect of achieving the desired outcome would be jeopardised by 'leakage'—the relocation of industry to areas not penalised by emissions caps. For these reasons the authors favour a symmetrical agreement with broad participation, although they conceded at the time of writing that there might be some headroom for developing countries to increase their emissions in the very short-run whilst they develop the institutional capacity to transition to a low-carbon economy. In the light of subsequent years of continuing increases in carbon emissions it is questionable whether they would now feel such concessions were compatible with achieving an ecologically acceptable outcome.

The second contested claim concerns historical responsibility or 'carbon debt'. Posner and Weisbach present data that purports to show that cumulative emissions attributable to developing nations are likely to equal those attributable to the industrialised world by as early as 2030. They also dispute the corrective justice model in principle, arguing that current Americans cannot be held responsible for the emissions of past generations, and that failing to cooperate with international abatement efforts—even after the first IPCC report, which many people regard as the date from which the negative consequences of climate change could no longer be regarded as unforeseeable—did not amount to negligence. Furthermore they argue that it is important to disentangle other historical grievances that risk miring the climate negotiations in interminable disputes over who owes what to whom. They therefore propose a forward-looking agreement that disregards the issue of historical responsibility.

[400] See also: Jacaranda Turvey, 'Germain Grisez and the Climate Challenge', *Modern Believing*, 54.4 (October 2013), pp. 300–311.

The third argument, that everyone should have equal emissions rights, is widely seen as a requirement of justice. One version of this principle advocates allocation of permits in a cap-and-trade scheme on a per-capita basis. Posner and Weisbach's objection to this is largely pragmatic. In their view states cannot realistically be expected to enter into any agreement that substantially deviates from International Paretianism: all parties must be better off under the treaty than they would be without it, or—to the extent that they are not—must receive side-payments or other inducements to secure their cooperation. A global cap-and-trade scheme with per-capita allocation of permits breaches this requirement by in effect redistributing wealth on an unacceptably large scale from high per-capita emitters (not all of whom are wealthy) to low per-capita emitters (not all of whom are poor). Additionally they argue that any treaty that gives an advantage to the most populous states has unfortunate incentive effects. They contend not only that the US is likely to veto global cap-and-trade with per-capita permit allocation because of the redistributive consequences, but more contentiously that they are right to do so. Interestingly however, they point out that 'anyone who favours a treaty that stabilises greenhouse gas concentrations favours eventually moving towards roughly equal per-capita emissions'[401] since contraction creates its own convergence.

Burden Sharing, justice and Grisez School ethics

On the first point, Grisez is extremely clear that differential burden sharing in mitigation of environmental harms is a requirement of justice, arguing that:

> Because poor individuals and societies have fewer alternatives, they may rightly accept side effects wrong for the wealthy to accept. Thus the affluent should willingly accept greater burdens in preventing and correcting pollution, rather than favouring measures which overburden the poor by imposing identical burdens on rich and poor alike.[402]

This requirement is striking in its similarity to article 3.1 of the United Nations Framework Convention on Climate Change (UNFCCC):[403]

> The parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country parties should take the lead in combating climate change and the adverse effects thereof.

And principle 7 of the 1992 Rio Declaration on Environment and Development:

> States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.[404]

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[401] Posner and Weisbach, *Climate Change Justice*, p. 125.

[402] Grisez, *Living a Christian Life*, Chapter 10, QE 5 (i) p. 815.

[403] Article 3.1, *United Nations Framework Convention on Climate Change*.

[404] Principle 7, *Rio Declaration on Environment and Development*, 1992, http://www.jus.uio.no/lm/environmental.development.rio.declaration.1992/portrait.a4.pdf [accessed 20 October 2015].

However, although it seems that Grisez would endorse the principle of common but differentiated responsibilities and capabilities as a requirement of climate justice, it may be that the very real pragmatic, political difficulties in implementing asymmetrical greenhouse gas abatement pathways for different countries depending on their level of development could be accommodated in some other way, through compensatory development assistance or technology transfer under the clean development mechanism for example. Clearly as time goes on and emissions continue to rise, the available headroom for prioritising development needs envisaged in the framework convention is increasingly exhausted, forcing a situation in which an environmentally acceptable outcome will require rapid abatement efforts from all major emitters. But Posner and Weisbach claim not only that an asymmetric deal is impractical and politically unachievable (and, I would add, inadequate to the scale of the challenge) but that a forward-looking, symmetrical abatement regime is what climate justice requires. In principle, it would seem that Grisez would not support their position on this issue.

On the second point, Grisez's position on the duty to aid others who have been adversely affected by the actions of one's own community seems relevant to the question of historical responsibility for climate change:

> Needs due to some sin or defect of a community to which one belongs (for example, misery in a region one's own nation has devastated by unjust military action) deserve special consideration even if in no way one's own fault (one did everything one could to prevent the injustice)[405]

Grisez is extremely critical of the throw-away culture of materialistic lifestyles in the affluent world, commenting that 'the essential conditions of human life on earth would suffer irreparable damage if everyone consumed and polluted at the same rate as people living in wealthier nations'[406] adding:

> Moreover, considering what is now known about the environmental impact of many activities, the harm a person does to others by maintaining a wasteful, consumerist style of life can no longer be judged insignificant as it once was. Even if particular instances do little harm, the choice—and so the moral responsibility—usually does not concern those individual instances, since they result from the habits and policies of one's style of life. In view of the harm to others resulting from one's whole way of life, the choice not to undertake the practice of conservation and change one's habits can hardly be a light matter.[407]

In view of this critique of Western lifestyles, it would seem that Grisez cannot endorse Posner and Weisbach's call for an amnesty on historical responsibility for climate change. Even those in the industrialised world who conscientiously endeavoured to live an ecologically responsible lifestyle are part of a community that has inflicted and continues to inflict harm on others through the pollution that accompanies a consumerist culture. We cannot disregard the universal Christian duty to aid the destitute, which Grisez derives from the doctrine of the universal destination of goods, nor can we evade the particular duty we owe those whose destitution is a result of climate change caused by our energy profligate culture.

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[405] Grisez, *Living a Christian Life*, Chapter 10. QE 5 (c) p. 812.

[406] Grisez, *Living a Christian Life*, Chapter 10, QE 1 (c) p. 802; citing Synod of Bishops, Second General Assembly, 697.

[407] Grisez, *Living a Christian Life*, Chapter 10, QD, 4, p. 799.

Furthermore, as we have seen in chapter two of this thesis, it would seem that the US government were seriously at fault in interfering with independent scientific findings and stalling the climate negotiation process. On the evidence this would seem to amount at least to negligence, implying a moral duty to recompense those injured as a result. So it would seem that Grisez's theological ethics leads us to the conclusion that citizens of industrialised societies in general and of the United States in particular are under an obligation to assist climate victims now suffering the impacts of historical emissions. At least since the time when the scientific basis of climate change was sufficiently well understood to reasonably foresee that harm to others would be caused by ongoing emissions, it would seem that parties who failed to take abatement action were at least negligent, and wilful distortion of evidence—where this has been shown to have occurred—makes the resultant injustice more serious. If Posner and Weisbach want to argue that the United States as sole super-power will exert disproportionate bargaining-power in the international arena, that is one thing, but to claim that such action meets the requirements of justice overstates the case.

However, again, it is not necessary for a just outcome that the abatement aspect of the climate deal should fully reflect differential historical responsibilities, provided the principle of differential burden sharing is applied to the overall treaty such that historical wrongs are not simply imposed without redress on those least able to bear the burden. In addition, Grisez's ethics mandates Christians to take personal responsibility for alleviating the plight of victims of injustice 'even though the mass of human misery will be reduced only infinitesimally' since the value of such action derives from 'the immeasurable dignity of each person whose need is met.'[408] And we should also be prepared to 'co-operate in using every morally acceptable means to mitigate and overcome structural injustices'[409]—including unabated climate change—that are the cause of human misery.

On the third issue, the sharing of emissions allowances: if one considers the atmosphere as the global commons, Grisez's norm for the use of common property—that it should be shared fairly—might be seen as applicable. This would seem to suggest in principle that equal per-capita emissions entitlements would be reasonable, notwithstanding the redistributive consequences of moving towards such an arrangement. Grisez's discussion of state expropriation of property that is being unjustly used against the common good is also relevant here. On this basis, we might argue that those who are currently free to exploit more than their fair share of the atmospheric sink should not expect to be compensated for losses incurred when public authorities restrict their unjust activities for the common good.

However, we must also consider Grisez's construction of the state of nature in his discussion of the origins of property and the implication he himself draws from this:

> The universal destination of goods must be understood rightly. This principle does not mean that in the beginning human persons jointly owned the material world, with each having an equal share; no such primitive social order ever existed. Therefore the universal destination of goods does not imply even a basic or *prima facie* claim on the part of each individual to an equal portion of the world's goods. The principle means, rather, that nothing in subhuman creation ever comes to be with a label saying: this good is meant for this person but not that one, this group but not that, people of this sort but not of that sort. Instead, both in the beginning and now, God provides all the riches of the material world for all people to use as he directs. His directions are the moral norms flowing from the principles of

[408] Grisez, *Living a Christian Life*, Chapter 10, QE 5 (d) p. 813.

[409] Grisez, *Living a Christian Life*, Chapter 10, QE 5 (d) p. 813.

> practical reason, which human beings naturally know. Thus, God makes material goods available for all humans to use reasonably, that is, for the promotion and protection of true human goods, not only in the users but in others, by cooperating justly with their creator and with one another.[410]

This passage seems to suggest that Grisez would not endorse the claim frequently made by the climate justice movement that equal per-capita shares in the atmospheric capacity should be construed as a natural right. However, as we have seen, he does argue strongly both that property ownership is primarily a responsibility to administer assets for the common good and that ownership does not imply any right to abuse or squander property.

Grisez cautions against romantic environmentalism that takes no account of the costs of environmental legislation imposed through job-losses and increased costs of necessities that disproportionately impact the poor. This is of course true within nation states as well as between them: domestic legislation needs to take into consideration the negative impacts on the working poor of recessionary policy proposals designed to promote ecological security.

On balance, I would conclude that Grisez's ethics does not favour grandfathering of pollution rights, but he would endorse Posner and Weisbach's proposal for parallel mitigation curves over Aubrey Meyer's 'Contraction and Convergence' model.

Laudato Si': A Grisez School Response

On 18 June 2015, whilst I was making final revisions to this thesis, Pope Francis published his long awaited encyclical on the environment, *Laudato Si'*. Since this development in Catholic social teaching is crucial to my academic interests, some response is clearly called for. My aim in this section is to offer a brief exposition of the new encyclical followed by a reflection on its content from the perspective of Grisez School environmental ethics. This reflection will focus on climate change and the links between this challenge and other aspects of the ecological crisis. I shall also comment briefly on animal ethics issues in *Laudato Si'*.

In writing his environmental encyclical *Laudato Si': On Care for Our Common Home*,[411] Pope Francis's intention was not to settle disputed science or to replace politics,[412] but to initiate an inclusive conversation[413] with a clear articulation of the Catholic position, in the hope that an open and honest debate[414] on how we address the ecological challenges of our times might ensue. The key features of the crisis identified in *Laudato Si'* are pollution and climate change, depletion of water resources and the collapse in biodiversity. As regards the climate challenge, the Pope laments the failure of our collective efforts to bend the trajectory and identifies a number of factors that have contributed to this failure. One problem has been the inadequacy of our economic models to address intergenerational justice issues and to value ecosystem services appropriately.[415] Another has been the failure of our systems of governance at all levels to respond robustly and on a scale

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[410] Grisez, *Living a Christian Life*, Chapter 10, QD 1 (b) p. 790.

[411] Pope Francis, *Laudato Si': On Care for Our Common Home*, 18 July 2015. http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html [accessed 14 July 2015]

[412] *Laudato Si'* 188.

[413] *Laudato Si'* 14.

[414] *Laudato Si'* 188.

[415] *Laudato Si'* 190.

commensurate with the size of the challenge. As a 'global commons problem' climate security needs to be addressed at the international level and the lack of effective structures of global governance is problematic.[416] Progress on implementation of the Rio principles and negotiations towards agreeing an enforceable treaty have been impeded by nation states prioritising their self-interest over the global common good.[417] At the national and local levels of government, weak structures of governance, corruption and the breakdown of the rule of law in some places bodes ill for the enforcement of environmental legislation.[418] Yet even where robust structures are in place, campaigns of misinformation, evasion of responsibility and the problem of political short-termism have resulted in slow progress.[419] At every level Pope Francis discerns an absence of the culture and moral commitment necessary to confront a challenge of this magnitude.[420]

The solution *Laudato Si'* proposes requires action at every level focused on the global common good and integrating the imperative to care for creation with action to address poverty and uphold universal human dignity.[421] On the political level, Pope Francis calls for an international treaty that adopts the polluter-pays[422] and precautionary[423] principles and incorporates intergenerational justice requirements and fair burden-sharing. In an unusually specific public policy interjection, carbon trading is dismissed as a mechanism for internalising the cost of pollution and incentivising behaviour change in industry.[424] Although use of consumer pressure to push for moral change is commended[425] there is no specific mention of divestment. However more generally, in the workplace, civil society and the family, everyone is exhorted to play their part in achieving the transition to climate security, through establishing green businesses and social enterprises, through consumer power, ecological citizenship and re-examining our lifestyles. The educational challenge goes beyond raising awareness of the science and politics of climate change, requiring moral education, nurturing of the virtues and a renewed attention to aesthetics as a motivator of creation care.[426]

As regards the water crisis, Pope Francis reiterates established Catholic teaching on water as a human right, which gives rise to a 'grave social debt' towards those suffering from water poverty and thereby prevented from living lives commensurate with their dignity.[427] He notes the connection between climate change and both food and water security issues, especially in Africa where crop yields are threatened by rising temperatures and drought.[428]

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[416] *Laudato Si'* 174.

[417] *Laudato Si'* 169.

[418] *Laudato Si'* 142.

[419] *Laudato Si'* 26; 169; 178.

[420] *Laudato Si'* 53.

[421] *Laudato Si'* 139.

[422] *Laudato Si'* 167.

[423] *Laudato Si'* 186.

[424] *Laudato Si'* 171.

[425] *Laudato Si'* 206.

[426] *Laudato Si'* 215.

[427] *Laudato Si'* 30.

[428] *Laudato Si'* 51.

Pope Francis laments the collapse of marine biodiversity[429] and stresses the inherent value of all God's creatures,[430] species[431] and ecosystems.[432] The concept of an 'integral ecology'[433] that links care for the vulnerable, including unborn children,[434] to creation care is a central motif of the encyclical and St Francis of Assisi is held up as a model of this integration.[435] *Laudato Si'* forcefully rejects the idea that 'dominion' can be equated with a licence to exploit other animals.[436] Although factory farming is not specifically addressed, civic support for small scale local production is commended,[437] and—in the context of a discussion of medical experimentation—needlessly causing animals to suffer and die is condemned.[438]

The encyclical is coloured throughout by Christian hope, insisting that love always proves more powerful than the forces of violence and disintegration, even in dire circumstances,[439] since we are creatures with inalienable dignity as *Imago Dei* who were made for love. Hence gestures of generosity, solidarity and care cannot but well up in us[440] and the potential to make a positive contribution to the collective challenge, entering into a civilisation of love[441] that will protect human dignity and the environment, exists in every human heart. This gives us reason to hope that our generation will be remembered for generously shouldering our responsibilities,[442] for the awakening of a new reverence for life, the firm resolve to achieve sustainability, the quickening of the struggle for justice and peace and the joyful celebration of life.[443]

A Grisez School Response

The encyclical—in keeping with the tradition of its genre—is an essay in moral theology in the light of papal discernment of the signs of the times. As the prominent Grisez Scholar Robert George correctly notes in a much discussed article[444]—published in anticipation of a focus on climate change in *Laudato Si'*—although the Pope can teach authoritatively on our moral responsibilities in relation to the natural environment, his teaching authority does not extend to scientific questions. Pope Francis acknowledges this, stating that the Church does not presume to settle scientific questions or to replace politics. Nevertheless he states baldly that a 'frank look at the facts' reveals the

[429] *Laudato Si'* 41.

[430] *Laudato Si'* 69; 76; 140.

[431] *Laudato Si'* 36.

[432] *Laudato Si'* 140.

[433] *Laudato Si'* 10; Chapter 4.

[434] *Laudato Si'* 120.

[435] *Laudato Si'* 10.

[436] *Laudato Si'* 67.

[437] *Laudato Si'* 129.

[438] *Laudato Si'* 130.

[439] *Laudato Si'* 149.

[440] *Laudato Si'* 58.

[441] *Laudato Si'* 231.

[442] *Laudato Si'* 165.

[443] *Laudato Si'* 207.

[444] Robert P. George, 'Four Things to Remember about the Pope's Environment Letter', *First Things* 1/3/15 http://www.firstthings.com/blogs/firstthoughts/2015/01/four-things-to-remember-about-the-popes-environment-letter [accessed 15 July 2015]

dilapidation of our common home, and proceeds on the basis of an acceptance of the scientific consensus on anthropogenic global warming. Noting that some committed and prayerful Christians still tend to ridicule concern for the environment,[445] Pope Francis makes clear his view that the climate crisis is an issue of such grave concern that even doomsday predictions can no longer be dismissed with irony.[446]

Climate change has been described as 'the ultimate global commons problem':[447] the atmosphere is vulnerable to over-exploitation unless a concerted international effort is made to address the carbon pollution that arises from disparate sources and exerts its warming effects in geographically distant locations. In this context, Pope Francis reiterates the call of his predecessors in office for a 'true world political authority.'[448] Such a project is likely to prove unpopular in the United States, especially amongst political conservatives, yet—perhaps surprisingly—Germain Grisez urges Catholics to support international collaboration towards developing such an institution:

> Since there is a universal common good, the good of humankind as a whole, which neither national governments nor existing international organisations adequately serve, Catholics should support the self-limitation of its sovereignty on behalf of their nation and its collaboration in developing a worldwide political authority capable of discerning and evaluating problems which affect the universal common good and effectively directing international cooperation towards their just resolution. Pending the development of such an authority, Catholics should support the participation of their government in existing international organisations to the extent the activities of the latter seem to serve the international common good.[449]

Pope Francis asserts the urgent need for an enforceable international agreement and global regulatory norms to impose obligations and prevent unacceptable actions.[450] He laments the fact that international negotiations cannot make significant progress due to positions taken by countries which place their national interest above the global common good.[451] In *Climate Change Justice*, Posner and Weisbach insist that the only way to ensure broad participation in a climate treaty is to build into its design the requirement of International Paretianism—each individual nation state must be better off under the treaty than without it or at least not much worse off: national abatement costs cannot be significantly more than benefits in the form of avoided climate-related harms.[452] The international negotiation arena, on this analysis, is essentially a Hobbesian state of nature in which it is unexceptional for countries to place their own national interest above the global common good. Clearly, neither Germain Grisez nor Pope Francis would accept their argument or the national negotiating positions that have been adopted on this basis.

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[445] *Laudato Si'* 217.

[446] *Laudato Si'* 161.

[447] Aldy and Stavins, *Architectures for Agreement*, p. 1.

[448] *Laudato Si'* 175.

[449] Germain Grisez, *Living a Christian Life*, Chapter 11, Question C, 2(f) p. 868.

[450] *Laudato Si'* 173.

[451] *Laudato Si'* 169.

[452] Posner and Weisbach, *Climate Change Justice*, p. 179.

For Pope Francis, an international climate treaty must meet the requirements of intergenerational justice[453] and fair burden-sharing.[454] As regards intergenerational justice, it has been a long-standing tenet of Catholic social teaching that the environment is a gift from God; Grisez quotes John Paul II: 'humanity has in its possession a gift that must be passed on to future generations, if possible, passed on in better condition';[455] Catholic teaching on the equal dignity of persons and the rights of the unborn are of a piece with concern for posterity. As regards fair burden-sharing, as we have seen, Grisez would not favour Posner and Weisbach's suggestion that historical emissions responsibility should be disregarded, since 'needs due to some sin or defect of a community to which one belongs […] deserve special consideration even if in no way one's own fault.'[456] This principle is expressed in the context of a discussion of Christian responsibilities to the poor in light of the universal destination of goods, but it seems reasonable to apply it in the context of fair distribution of the burdens of climate change. In addition, as we have seen, Grisez's argument that poor societies may rightly accept environmental side-effects wrong for the wealthy to accept leads him to conclude that the affluent should accept greater burdens in preventing and correcting pollution.[457] This is the thinking behind the formulation of article 3.1 UNFCCC and principle 7 of the Rio Declaration, which call for differential burden-sharing on the basis of common but differentiated responsibilities and capabilities. In principle, the polluter should pay the costs of pollution abatement, but some allowances need to be made for countries that need to strengthen their institutions and address acute poverty before it is reasonable to expect them to invest in transition technologies. However, there is a need for creative interpretation here, given the need for all major emitters—including developing countries like China, India and South Africa—to commit to comprehensive decarbonisation in the near-term if we are to retain a realistic chance of avoiding climate chaos. The industrialised world will need to trade technology transfer and assistance for abatement compliance in order to honour the requirements of climate justice whilst pursuing an aggressive global mitigation strategy.

The specific condemnation of carbon-trading in *Laudato Si'* is troubling. Clearly some policy mechanism is needed that puts a price on carbon in order to incentivise clean neotechnologies and internalise the cost of polluting. Carbon taxes and cap-and-trade schemes are the two alternatives and there has been a great deal of academic debate between economists and ethicists as to their relative merits. Michael Northcott is scathing on the subject of carbon-trading. Noting the ineffectiveness of the European Emissions Trading Scheme, Northcott sees such market mechanisms as:

> A significant further advance in international law of the neoliberal utopian dream of regulating all human activity through the interaction of supply and demand curves, and autonomous economic management, instead of moral and political deliberation in parliaments, courts and local forms of governance. Carbon emissions-trading also represents an attempt by governments to avoid their

[453] *Laudato Si'* 159.

[454] *Laudato Si'* 170.

[455] Grisez, *Living a Christian Life*, Chapter 10, Question B, 2(c) p. 776 n. 40; quoting *Christifideles laic*i 43 http://w2.vatican.va/content/john-paul-ii/en/apost_exhortations/documents/hf_jp-ii_exh_30121988_christifideles-laici.html [accessed 14 July 2015]; see also Grisez, *Living a Christian Life*, Chapter 11, Question C, 2(e) p.868; Grisez, *Living a Christian Life*, Chapter 10, Question B, 2 (a) p. 775.

[456] Grisez, *Living a Christian Life*, Chapter 10, Question E, 5(c) p. 812.

[457] Grisez, *Living a Christian Life*, Chapter 10, Question E, 5(i) p. 815.

> responsibility for legal regulation of carbon emissions which would make polluters pay—through taxation and fines—for the damage they are doing to the climate. Carbon trading in its various forms is a highly ambiguous development. The new global carbon market is not incentivising real reductions in emissions. But it has created tremendous new trading opportunities, and new opportunities for fraud and injustice.[458]

Posner and Weisbach argue for a carbon tax regime over cap-and-trade as a policy instrument for decarbonisation mechanism, essentially on the basis that the latter—coupled with per-capita allocation of permits—would result in unacceptably large transfers of resources from wealthy countries like the United States to developing nations[459] whose corrupt governments—they allege—cannot be trusted to manage such vast resources or to enforce rules against their wealthy cronies.[460] Richard Cooper favours a carbon tax regime for the same reason, describing international carbon-trading as 'politically impossible' because of its wealth redistributing consequences.[461] However, cap-and-trade schemes have their able defenders[462] and it is not clear that as a policy instrument they are either necessarily inadequate to the task or simply a mere ploy to maintain excessive consumption as Pope Francis asserts. Effectiveness would depend on setting a high enough carbon price and ratcheting it up over time to drive emissions down; the unfair advantaging of current polluters would only apply to schemes in which there was grandfathering of emissions rights, not to per-capita allocation schemes or auctioning of permits.

Before the encyclical was published, I thought that Grisez's ethics would not favour equal per-capita emissions rights, even in the long-term, since he argues that the universal destination of goods does not imply a *prima facie* claim on the part of each individual to an equal portion of the world's goods.[463] On the other hand, his argument concerning the right of the state to expropriate property that is being used irresponsibly led me to conclude that he would also oppose the grandfathering of emissions permits to existing polluters. It would seem that Grisez, Northcott, Cooper and Posner and Weisbach might all share the misgivings expressed in *Laudato Si'* on carbon trading, but for very different reasons.

Environmental campaigners for 'divestment' were frustrated that, although consumer boycotts of certain goods as a mechanism for exerting pressure for moral change are mentioned,[464] this is not explicitly extended to personal and corporate investment decisions. Grisez is more forthright, stating that one should 'try to avoid turning over the management of one's savings to people who will use them in unjust or otherwise immoral activities, and should try instead to invest in something morally acceptable.'[465] Investors need to make a prudential judgement as to whether or not fossil fuel industries are using their capital in activities that are rightly judged to be unjust or immoral, given

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[458] Michael Northcott, *A Moral Climate*, p. 136.

[459] Posner and Weisbach, *Climate Change Justice*, p. 122.

[460] Posner and Weisbach, *Climate Change Justice,* p. 177.

[461] Richard N. Cooper, Alternatives to Kyoto: the case for a carbon tax, pp. 105–115, in: Aldy and Stavins, *Architectures for Agreement*, p. 111

[462] See for example: Jeffrey Frankel, Formulas for quantitative emissions targets, pp. 31–56; Axel Michaelowa, 'Graduation and Deepening', pp. 81–104, in: Aldy and Stavins, *Architectures for Agreement*

[463] Grisez, *Living a Christian Life*, Chapter 10, Question D, 1(b) p. 790.

[464] *Laudato Si'* 206.

[465] Grisez, *Living a Christian Life*, Chapter 10, Question E, 6(e) p. 817.

that it would be unreasonable to expect all fossil-fuel use to cease immediately, and we are all complicit in various ways in propping up the fossil economy. As Giddens cautions, we should guard against the easy demonising of the oil industry.[466] According to Giddens, BP was the first major oil company to publicly acknowledge the dangers of global warming, accepting that the industry needed to be part of the solution, in a speech by CEO John Browne at Stanford University back in 1997. Other oil companies quickly followed suit.[467] As Giddens says, 'a new generation of business leaders—who quite often work directly with NGOs—is arising which not only acknowledges the perils of climate change, but is active in the vanguard of reaction to it.'[468]

For Catholics, work is an arena for moral action, whether in the context of a profit-making conventional enterprise or some form of cooperative venture or social enterprise. Pope Francis commends different models of business activity, but contrary to some commentators on *Laudato Si'* he does not endorse an anti-market left-wing agenda. Business is held up as a noble vocation directed to producing wealth and improving our world and a fruitful source of prosperity, especially if it sees the creation of jobs as an essential part of its service to the common good.[469] This is in line with Grisez's position that some are called to administer material things for others' use:

Sometimes, although its owners could give away property or money, they have such a gift for administering material goods that they should accept that as an element of their personal vocation. For example, people with both surplus wealth and skill in management can rightly set up or invest in businesses which provide just wages for gainful work and useful goods and services at fair prices, along with enough profit to compensate them reasonably for their work, which contributes to society's common good. [470]

However, as we have seen, Grisez argues that owners have no absolute rights over their property: they have no right to abuse or squander assets; rather they have a duty to use their property for the common good and a strict obligation to aid the destitute. Hence for Grisez, the practice of conservation is not a 'merely fashionable cause'[471] but an essential aspect of the Christian moral life, and unjust use of property generally constitutes grave matter.[472] It is in the context of his discussion of conservation of property that Grisez makes the connection between environmental harms and sinful profligacy, underscoring that the harm done to others by living a wasteful, consumerist lifestyle can no longer be judged insignificant in view of what we now know about the environmental impact of such choices.[473] On this issue, Grisez is perfectly aligned with *Laudato Si'* in which Pope Francis repeats calls by his predecessors in office for ecologically and socially responsible lifestyle change and in addition has no hesitation in warning consumerist industrialised nations that they

[466] Giddens, *The Politics of Climate Change*, p. 120.

[467] Shell also publicly backed climate action 18 years ago according to former CEO Mark Moody-Stuart, *Speech to The Carbon Trust Chairman's Dinner*, Somerset House, London 2 June 2015 https://www.carbontrust.com/news/2015/06/sir-mark-moody-stuart-speech-carbon-trust-chairmans-dinner [accessed 14 July 2015]

[468] Giddens, *The Politics of Climate Change*, p. 121.

[469] *Laudato Si'* 129.

[470] Grisez, *Living a Christian Life*, Chapter 10, Question E, 5(f) p. 814, n. 92 see QA.

[471] Grisez, *Living a Christian Life*, Chapter 10, Question E, 1(d) p. 803.

[472] Grisez, *Living a Christian Life*, Chapter 10, Question E, 1(d) p. 802.

[473] Grisez, *Living a Christian Life*, Chapter 10, Question D, 4 p. 799.

stand in a position of grave ecological debt towards the victims of climate change, especially in Africa[474] where the rise in temperature together with drought threatens staple food production.[475]

The three main features of the ecological crisis identified in *Laudato Si'*—pollution and climate change, water security and the collapse in biodiversity—are closely interconnected since climate change is a major driver of water related challenges and species loss. Where access to drinking water is at risk, Catholic social teaching is clear that this is a human rights issue.[476] As Christiana Peppard warns, fresh water looks set to become an increasingly scarce and contested resource as climate change amplifies patterns of aridity and deluge, making access to water a key justice issue of our times and one that disproportionately impacts the lives of women and girls.[477] *Laudato Si'* connects the dots between poverty, water challenges and food security in the context of a changing climate and stresses the gravity of our social debt to those suffering from water poverty.[478] For Grisez, as we have seen in our discussion of fair burden-sharing, there is a strict duty on all Christians to aid the destitute;[479] this duty operates irrespective of any culpability on the part of those giving aid, but as Grisez argues, is all the more pressing where the community to which one belongs has been the cause of the suffering.[480] Grisez warns us to resist the temptation to rationalise evasions of this obligation.[481] Although in fulfilling this requirement of Christian justice as individuals we will neither change the world nor eliminate poverty, even if we have vast our personal resources at our disposal, it will make a real difference to each person whose plight is mitigated and is worthwhile because of the immeasurable dignity of each human person.[482]

Laudato Si' laments the loss of biodiversity, particularly the decline in marine species that is turning the wonderworld of the seas into an underwater cemetery bereft of colour and life.[483] In Pope Francis's critique of the concept of dominion and his attribution of inherent value to ecosystems and non-human species, Charles Camosy sees a positive shift in teaching in *Laudato Si'*.[484] Yet, as we have seen, Grisez construes the dominion mandate as no more than a call to responsible work,[485] limited by moral norms requiring preservation of the common heritage for future generations,[486] and he also recognises inherent value in other species.[487] Given his orthodox methodology, it is clear that Grisez did not intend this to be a theological innovation, but a faithful exposition of existing

[474] *Laudato Si'* 30; 51.

[475] Camilla Toulmin, *Climate Change in Africa*, (London; New York: Zed Books, 2009), p. 56.

[476] Pontifical Council for Justice and Peace, *Compendium of the Social Doctrine of the Church*, 365; 485; 447.

[477] Christiana Peppard, *Just Water*, (Maryknoll, NY: Orbis Books, 2014) p. 184.

[478] *Laudato Si'* 30.

[479] Grisez, *Living a Christian Life*, Chapter 10, Question E, 5(b) p. 811; Mt 25: 45–46.

[480] Grisez, *Living a Christian Life*, Chapter 10, Question E, 5(c) p. 812

[481] Grisez, *Living a Christian Life*, Chapter 10, Question E, 5(d) p. 812.

[482] Grisez, *Living a Christian Life*, Chapter 10, Question E, 5(d) p. 813.

[483] *Laudato Si'* 41.

[484] Charles C. Camosy, *Laudato Si'* on Non-human Animals: Three Hopeful Signs, Three Missed Opportunities, 24 June 2015 http://catholicmoraltheology.com/laudato-si-on-non-human-animals-three-hopeful-signs-three-missed-opportunities/ [accessed 14 July 2015]

[485] Grisez, *Living a Christian Life*, Chapter 10, Question B, 2(b) p. 775.

[486] Grisez, *Living a Christian Life*, Chapter 11, Question C, 2(e) p. 868.

[487] Grisez, *Living a Christian Life*, Chapter 10, Question B, 1 p. 772.

Catholic teaching. As I have argued earlier, Grisez's endorsement of inherent value in non-human creatures suggested that the concept is consistent with Catholic doctrine, raising the expectation that it might be incorporated into the Church's social teaching: an expectation that *Laudato Si'* has now fulfilled. Camosy is disappointed that factory farming as a structural sin is not specifically addressed, nor is the connection between intensive agriculture and greenhouse gas emissions adverted to in the encyclical. It may be that Grisez's footnote on vegetarianism[488] provides a clue as to how Catholic social teaching might develop in the future: Since Scripture and tradition allow meat eating, it is unlikely that vegetarianism will be mandated by the Vatican any time soon, but one would expect at some point in the future that the practice might be commended as a specific incidence of a commitment to a less wasteful, less climate polluting lifestyle, and current teaching that condemns 'needless suffering' in experimentation on animals might be extended at least to the more egregious abuses of millions of non-human animals in the meat industry.

To sum up: *Laudato Si'* is a restatement of Catholic moral theology in the light of the ecological crisis, and as such we would expect substantial alignment between the new encyclical and the application of Germain Grisez's orthodox Catholic moral theology to climate change proposed in this thesis. For example, Grisez's internationalism is aligned with Pope Francis's position because both Grisez and the present Pope draw heavily on the work of Francis's predecessors in office *Laudato Si'* reinterprets their thought in a new context. It was predictable that the new encyclical would call for an enforceable international treaty that incorporated intergenerational justice requirements and fair burden-sharing arrangements, taking account of historical emissions responsibility and the development needs of the poor. Grisez's theology can help us to flesh out the concept of climate justice envisioned in the encyclical and highlight where the proposals for a 'fair and ambitious' abatement deal fall short of the Catholic vision. In view of the long-standing common good tradition, it was no surprise that Pope Francis calls on nations to subordinate their national self-interest to the global common good and the established doctrine of the universal destination of goods, the foundation stone of Grisez's treatment of work and property, made clear that—in the context of food-security and water challenges in a changing climate—*Laudato Si'* would stress the absolute duty on Christians to aid the destitute.

The recognition of the climate challenge in *Laudato Si'* is far from new, although its discussion in an encyclical invests Catholic commitment to solving this crisis with the highest authority. In the light of the new encyclical the urgent need for a Grisez School engagement with the issue is highlighted, showing the importance of the project this thesis seeks to initiate. In view of the connection between climate change and biodiversity loss, it was clear that the encyclical would promote protection of ecosystems and endangered species and again this aligns with Grisez's environmental ethics. The move in *Laudato Si'* towards full recognition of inherent value for non-human animals—which Grisez anticipates—seems not so much an innovation as a re-expression of an existing concept within Catholic social teaching in language more familiar to secular animal rights activists. However, in the context of bridge-building between the Church and the secular environmental movement which will be crucial for improving networks of Christian transition projects, the official recognition of inherent value creates an important new area of common ground. This might be a crucial first step towards a more coherent animal ethics in future Vatican teaching, which could include specific condemnation of the abuses involved in factory farming, which Grisez clearly does not condone. His

[488] Grisez, *Living a Christian Life*, Chapter 10, Question C, 2(c) p. 787, n 54.

comment on vegetarianism, stressing both food security and animal welfare issues, indicates one possibility for future development in Catholic social teaching in a climate constrained world.

The antipathy towards carbon trading in *Laudato Si'* was a surprise and the lack of any mention of divestment disappointed some activists. Those seeking to make an argument for divestment from fossil-fuel industries will find Grisez's position on ethical investment a stronger basis for their strategy than the new encyclical, although it remains a matter of judgement as to whether fossil fuel investments are unethical and whether divestment is likely to be a successful strategy in addressing the climate challenge. Pope Francis's commendation of business as a noble calling, where it is directed to creating worthwhile jobs and useful goods and services as a contribution to the commonweal, is a helpful corrective to politically left-wing interpretations of his position on carbon trading. Grisez's treatment of enterprise and investment chimes perfectly with this strand of thought in the encyclical.

In conclusion, it seems to me that there is much theological work to be done in analysing *Laudato Si'* and making its message accessible to a wider audience and there are a number of areas in which insights gleaned from Grisez's environmental ethics can augment areas of the encyclical that were not spelled out with much specificity and illuminate possible future moves in the development of Catholic social teaching on the environment.

Conclusion

As we saw in Section One, for Grisez, human persons are responsible to God and to one another—specifically including future generations—for our use of natural entities. He construes the whole realm of non-human nature as divine gift, possessing inherent meaning and value, subjected by divine mandate to responsible human dominion and ordered to human flourishing. I have shown how ecological considerations colour the whole structure of Grisez's ethical system. The language of 'sub-personal nature', dominion, ownership and subjugation is easily dismissed as speciesist and pejorative by environmentalists, as we saw in Section Two, but a closer look at Grisez's theological treatment of the biblical concept of dominion and its practice by Christians called to 'subdue the earth by their work' reveals that his understanding of the central concepts does not conform to environmentalists' expectations of a simplistically instrumentalist anthropocentricism productive of—and providing cultural justification for—ecologically destructive behaviour. In Section Three I have abstracted and applied central principles of Grisez's environmental ethics to the climate challenge, demonstrating that the Grisez School should endorse at least two of the three central claims of the climate justice movement.

Grisez's methodology does not encourage theological innovation, as we saw in Chapter Three of this thesis, which makes it extremely interesting that a moral theologian whom Ralph McInerny characterises as having 'long ago accepted the role of the paladin of the magisterium, taking on its critics whenever the opportunity presented itself'[489] can be shown to endorse inherent value in nature and to present as Catholic orthodoxy an ecologically constructive account of human dominion, work and property ownership as imbued with environmental and animal welfare responsibilities. This suggests that even if Catholic social teaching has elements of anthropocentrism

[489] Ralph McInerny, 'Grisez and Thomism', in: Nigel Biggar and Rufus Black (eds.) *The Revival of Natural Law: Philosophical, theological and ethical responses to the Finnis-Grisez School* (Aldershot: Ashgate, 2000) pp. 53–72, p. 53.

in tension with the more ecologically nuanced elements Grisez identifies it would seem possible in principle for the teaching to undergo ecologically positive development in a conservative, self-consistent way rather than through the more radical revisionism favoured by many scholars in ecotheology. Grisez exhorts Christians today to 'make a special effort to bring the light of faith to bear in understanding their responsibilities for subhuman creation.'[490] In light of the climate challenge as a sign of the times this task is all the more urgent, making the Grisez School construction of climate justice and the response to *Laudato Si'* in this thesis a timely and important contribution to Catholic ecotheology.

My next chapter discusses Jean Porter's important critique of the new natural law theory, which challenges Grisez and Finnis's construction of Aquinas and questions the foundations of their secular ethics. I shall argue that, notwithstanding Porter's objections, Grisez's theological ethics represents one philosophically coherent and theologically cogent ethical system and that, as such, it deserves much wider recognition and deployment, beyond the narrow confines of conservative Catholic medical and sexual ethics with which it is most commonly associated.

[490] Grisez, *Living a Christian Life*, Chapter 10, QB 2 (c) p. 776.

Chapter 5: Some Theoretical Issues

Introduction

We have seen in Chapter Four of this thesis that Grisez develops a sophisticated and ecologically constructive account of environmental ethics in which animals and natural entities are accorded inherent meaning and value. We have seen that application of principles drawn from Grisez's work to our contemporary climate crisis enables his work to be taken forward to meet this novel challenge and establish common ground with the climate justice movement. We have seen that environmentalist critics of Grisez's ethics have been too quick to dismiss his work, overlooking the animal welfare and environmental responsibilities that are built in to the new natural law placing ecological restraints on responsible dominion, work and property ownership and colouring the whole structure of Grisez's ethical system. Having recovered this underappreciated resource for environmental ethics, it remains to respond to some theoretical challenges to the new natural law: this will be the task of the present chapter.

The aim of this chapter is to engage with some of Grisez's critics in order to address the question: Is Grisez's ethics a species of natural law in the Thomist tradition and what implication does this have for its application to the ecological crisis? Grisez's and Finnis's critics in theology, philosophy and jurisprudence are many. Unfortunately, space available in this thesis will allow me to treat only a small selection of the voluminous literature on the theoretical basis of the Grisez School theory. Grisez and his collaborators, disciples and sympathisers have replied at length to their critics.[491] Nigel Biggar responds to Protestant critiques from the Barthian School,[492] and his student Rufus Black's ecumenical project seeks to reconcile Grisez with Oliver O'Donovan and Stanley Hauerwas.[493] Robert George responds to a swath of critiques from legal scholars in his *In Defense of Natural Law*.[494] The disputes between Grisez and his collaborators and others including Roman Catholic scholars from the Proportionalist School on disputed areas of sexual ethics, are notorious.[495] My intention here is

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[491] Some of these debates can be found for example in: Germain Grisez and Joseph Boyle, 'Response to Our Critics and Our Collaborators' in Robert George (ed) *Natural Law and Moral Inquiry: Ethics, Metaphysics and Politics in the Work of Germain Grisez*. (Washington DC: Georgetown University Press, 1998) pp. 213–237; John Finnis and Germain Grisez, 'The Basic Principles of Natural Law: A Reply to Ralph McInerny', *American Journal of Jurisprudence* 26 (1981) pp. 21–31. http://scholarship.law.nd.edu/cgi/viewcontent.cgi?article=1853&context=law_faculty_scholarship [accessed 7 October 2015], (responding to: Ralph McInerny, 'The Principles of Natural Law', *American Journal of Jurisprudence* 25 (1980) pp. 1–15. http://scholarship.law.nd.edu/ajj/vol25/iss1/1/ [accessed 7 October 2015]). Germain Grisez, 'Natural Law and Natural Inclinations: Some Comments and Clarifications' *New Scholasticism* 6 (1987) pp. 307–320. http://www.twotlj.org/OW-Reply%20Flippen.pdf [accessed 7 October 2015] (replying to Douglas Flippen, 'Natural Law and Natural Inclinations, *New Scholasticism* 5 (1986) pp. 284–316.)

[492] Nigel Biggar, 'Karl Barth and Germain Grisez on the Human Good: An Ecumenical Rapprochement' in Biggar and Black (eds) *The Revival of Natural Law; philosophical, theological and ethical responses to the Finnis-Grisez School* (Aldershot: Ashgate, 2000) pp. 164–183.

[493] Rufus Black, Christian Moral Realism: Natural Law, Narrative, Virtue and the Gospel (Oxford: OUP, 2000); Rufus Black, 'Towards an Ecumenical Ethic: Reconciling the Work of Stanley Hauerwas, Germain Grisez and Oliver O'Donovan' D. Phil Thesis, University of Oxford, 1996.

[494] Robert George, 'Natural Law and Human Nature' in Robert George (ed.) *Natural Law Theory*, pp. 31–41; Robert George, 'Recent Criticism of Natural Law Theory' in Robert George, *In Defense of Natural Law* (Oxford: OUP, 1999) pp. 31–82.

[495] See for example, Nicholas Bamforth and David Richards, *Patriarchial Religion, Sexuality and Gender: A Critique of the New Natural Law,* (New York: Cambridge University Press, 2008).

not to revisit these debates, but to focus mainly on Jean Porter's careful theoretical critique, pieced together from my reading of the central texts of her *oeuvre*,[496] drawing occasionally on the work of Ralph McInerny and others where necessary to illuminate the discussion. I have chosen to focus mainly on Jean Porter's critique since on her analysis the new natural law 'cannot be taken seriously as the effective guide to upright human choice, in the here and now, that it purports to be.'[497] Clearly, if this is the case, one should look elsewhere for answers to our contemporary ecological crisis and, since this is the opinion of a scrupulous and learned scholar, it warrants our careful attention.

In her prolific and influential work, Jean Porter argues for a recovery of virtue ethics, observing in moral theology a parallel set of problems to those diagnosed by her mentor Alasdair MacIntyre in philosophical ethics in the wake of the collapse of the enlightenment project. Her own preference is for a naturalistic approach to the task of reconstruction. Her central objection to the Grisez School project is that their recovery of natural law is unnecessary as a response to the naturalistic fallacy and is over-reliant on self-evidence in constructing its moral edifice. Porter sees the new natural law theory as aspiring, as did the enlightenment project, to autonomous moral reason; she finds their construction of practical reasoning overstrained and counterintuitive, running contrary to the way in which we naturally reason morally, and she offers a careful and challenging critique of the Grisez School's interpretation of Aquinas.

In order to defend my thesis that Grisez's theological ethics and its application to the climate crisis can yield a significant contribution to Catholic theological reflection in the Anthropocene, it will be necessary to rebut Porter's suggestion that the new natural law, as it stands, is unworkable. I shall argue that Grisez's theological ethics is less reliant on self-evidence than Porter seems to allow and, notwithstanding the difficulties she identifies with Finnis's interpretation of Aquinas on practical reasoning and the basic goods, the theory stands as a cogent moral theology anchored to a biblical theory of Christian character derived from Christ's Sermon on the Mount.

The question this chapter aims to address is raised by Nigel Biggar in his conclusion to the volume of essays in response to the Grisez School that he co-edited with Rufus Black.

> We are reminded that the rationalist form of ethical realism that Grisez and Finnis espouse has long brought them into contention with certain other Thomists—for egregious example Henry Veatch—who prefer a naturalist version. To some extent this is a dispute about who can lay best claim to the mantle of St Thomas; and as such it is of limited importance. What would be of much greater importance is the claim that the rationalism of the Grisez School suffers from a serious deficiency that a certain ethical naturalism can supply. And indeed this is what Northcott himself asserts, when he argues that the

[496] Jean Porter, *The Recovery of Virtue: The Relevance of Aquinas for Christian Ethics* (Louisville, Kentucky: Westminster / John Knox Press, 1990); Jean Porter, *Moral Action and Christian Ethics* (Cambridge: Cambridge University Press, 1995); Jean Porter, *Natural and Divine Law: Reclaiming the Tradition for Christian Ethics* (Grand Rapids, Michigan / Cambridge, UK: William B. Eerdmans, 1999); Jean Porter, *Nature as Reason: A Thomistic Theory of the Natural Law* (Grand Rapids, Michigan / Cambridge, UK: William B. Eerdmans, 2005); Jean Porter, *Ministers of the Law, A Natural Law Theory of Legal Authority* (Grand Rapids, Michigan / Cambridge, UK: William B. Eerdmans, 2010)

[497] Gerard Bradley and Robert George, 'The New Natural Law Theory: A Reply to Jean Porter,' *The American Journal Of Jurisprudence* (1994) pp. 303–315, at p. 304. http://scholarship.law.nd.edu/cgi/viewcontent.cgi?article=1848&context=law_faculty_scholarship [accessed 7 October 2015].

> School's rationalism is expressive of an anthropocentrism that, unable to recognise the inherent value of non-human being, encourages human abuse of the environment; and that the prevention of this abuse requires the recovery of natural teleology as a basis for the ascription of rights to non-human species.[498]

Biggar leaves open the question as to whether the new natural law suffers, as Northcott asserts, from a deficit that disables it as a vehicle for environmental ethics. I have addressed Northcott's position in Chapter Four of this thesis, concluding that there is more of value in Grisez's environmentalism than Northcott allows. However within a Roman Catholic context, the question as to who can best lay claim to the mantle of St Thomas is perhaps more important than Nigel Biggar allows. As a lens through which to view the development of Catholic social doctrine, and to predict future moves that may be open to the Vatican, one needs a coherent and sophisticated Catholic worldview; Grisez's theological ethics provides one such lens. However, every lens introduces its own distortions and clouds the view to a greater or lesser extent. It may be, as Celia Deane-Drummond has suggested, that Porter's reading of Aquinas provides a clearer and less distorting insight into doctrinal development. If this is the case, it is important for this thesis to concede the point, whilst asserting that the recovery of Grisez's environmental ethics has value nonetheless as a framework within which Catholics might reflect on the ecological challenges of our age.

Is Grisez's ethics a species of natural law in the Thomist tradition, and what implications does this have for its application to environmental ethics? In order to address this question we will need to focus on three issues: Is the new natural law Thomist? Does it qualify as a species of natural law? And does either of these affect its application in the context of our ecological crisis? Section One of this chapter looks at the Grisez School's claim to the mantle of St Thomas and Section Two looks at its claims to categorisation as a 'natural law theory,' including both its claims to universalism and its rationalistic character. The chapter concludes with a discussion of the implications of our findings for the application of Grisez's ethics to ecological issues.

Section One: Is the New Natural Law Thomist?

Ralph McInerny, in his contribution to Biggar and Black's edited collection of essays, draws attention to differences between Grisez and Aquinas on the nature of the good and the starting point of practical reason. In his view it is because the Magisterium continues to recommend Thomas Aquinas as our mentor in philosophy and theology that Grisez often invokes him in the course of developing his own moral theology, but, McInerny adds, 'it would be quite wrong to imagine that Grisez is undertaking yet another rethinking of Aquinas. His is, and is meant to be, an original work.'[499]

Jean Porter concurs on this point, although she finds much of value in Finnis's *Aquinas*, which she says 'will be read as one of the latest and most developed accounts of the 'new natural law' theory developed over many years' collaborative work among Finnis, Germain Grisez, Joseph Boyle, and a number of other scholars.'[500] In particular she commends his focus on those aspects of Aquinas's thought that are most directly relevant to contemporary social theory, including his account of

[498] Nigel Biggar, 'Conclusion' in: *The Revival of Natural Law*, pp. 283–293, p. 284,285.

[499] Ralph McInerny, 'Grisez and Thomism', p. 53.

[500] Jean Porter, 'Reason, Nature and the End of Human Life: A Consideration of John Finnis's "Aquinas"', *Journal of Religion,* 80 (2000) pp. 476–484, p. 484

cooperative action,[501] his theory of positive law[502] and his understanding of the common good.[503] In his discussions of these and related questions, Porter finds, Finnis relies less on his disputed analysis of Aquinas's overall moral theory and more on his insights as a scholar of jurisprudence, offering fresh, nuanced and largely persuasive interpretations.[504] His treatment of Aquinas's positive law she finds particularly valuable for its 'carefully qualified presentation of Aquinas's claim that an unjust law is in some sense not a true law at all.'[505] She also finds the case he makes in arguing that Aquinas does not hold that the state exists to inculcate virtue in its citizens convincing, although this is a controversial claim that flies in the face of common assumptions about Aquinas.[506] Furthermore, she commends his chapters on economic exchange and the state as offering 'illuminating and largely persuasive readings of Aquinas's views.'[507] Nonetheless, Porter provides a trenchant critique of the Grisez School's collective interpretation of Aquinas's general moral theory, disputing their stance on the naturalistic fallacy and their reading of the principles underpinning Aquinas's thought on homicide and on sexual ethics. In addition, she disputes Finnis's construction of natural and supernatural happiness, which he continues to insist is authentically Thomist although Grisez concedes this point.[508] A further issue of contention between Porter and Finnis is whether or not, for Aquinas, allowing one's emotions sway over one's reasons for action is 'the paradigmatic way of going and doing wrong.'[509]

On Porter's reading, although their 'new theory of the natural law' is widely influential[510] and a prominent exception to the general lack of engagement with the pre-modern natural lawyers by the various schools of contemporary jurisprudence, Grisez and Finnis 'offer a truncated Aquinas whose normative judgements do not depend in any substantive way on more broadly natural or metaphysical—let alone theological—commitments.'[511] Grisez and Finnis reject any appeal to human nature, broadly construed, as a starting point for ethical reflection, and it is at this point that Porter parts company with them, arguing instead that an Aristotelian philosophy of nature offers the most satisfactory way to understand the principles of practical reasoning inherent in human nature itself.[512] Whatever we may think of the theoretical merits of the Grisez School approach, Porter asserts, 'it is clearly not Aquinas's own, and many of its leading proponents now recognise this';[513] to

[501] John Finnis, *Aquinas: Moral, Political and Legal Theory*, (Oxford: OUP, 1998) pp. 23–29, 35–37

[502] Finnis, *Aquinas*, pp. 266–74.

[503] Finnis, *Aquinas*, pp. 234–239.

[504] Porter, *Reason, Nature and the End of Human Life*, p. 483.

[505] Porter, *Reason, Nature and the End of Human Life*, p. 483: Quoting Finnis, *Aquinas*, pp. 266–274.

[506] Porter, *Reason, Nature and the End of Human Life*, p. 484: Quoting Finnis, *Aquinas*, pp. 218–254..

[507] Porter, *Reason, Nature and the End of Human Life*, p. 484: Quoting Finnis, *Aquinas*, chapters 7, 8 and 9.

[508] Germain Grisez, 'The Ultimate End of Human Beings: The Kingdom, Not God Alone', *Theological Studies*, 69 (2008), pp. 38–61.

[509] Porter, *Nature as Reason*, p 237: Quoting Finnis, *Aquinas*, p. 73.

[510] Porter, *Ministers of the Law*, p 182.

[511] Porter, *Ministers of the Law*, pp. 66-67.

[512] Porter, *Ministers of the Law*, p. 83.

[513] Porter, *Ministers of the Law*, p. 67.

her knowledge Finnis is the only leading defender of the 'new natural law' who is still prepared to defend this as an accurate interpretation of Aquinas's own view.[514]

On Finnis's reading, Porter explains, Aquinas's moral theory rests on a particular understanding of what is required for human action to be fully rational. [515] We are directed by inclinations towards certain human goods, which are self-evident in the sense that the intellect grasps that they are good in themselves as soon as they are experienced, regardless of their emotional appeal or instrumental value to the pursuit of some other good. These basic human goods provide content for the first principle of practical reason: 'Good is to be done and pursued and bad is to be avoided.' Porter agrees with Grisez that this first principle is not in itself a moral principle, it is engaged in every operation of practical reasoning, including those operations directed towards sinful acts.[516] For Finnis, the moral 'ought' arises 'when the absolutely first practical principle is followed through, in its relationship to all the other first principles, with a reasonableness that is unrestricted and undeflected by any sub-rational factor such as distracting emotion.'[517] On Finnis's account of Thomist ethics, whilst an act is not rendered morally bad by the presence of self-referential and emotional motives, it is the rational pursuit of basic goods that renders an action morally praiseworthy.[518] The basic human goods provide the only intelligible reasons for action and, although no one can simultaneously pursue every instantiation of every basic good, reason demands we remain open to the fullest realisation of basic goods, and rules out any direct act that is contrary to some basic good as, for example, killing is contrary to the good of life or adultery is contrary to the good of marriage.[519]

Porter notes that for Aquinas, actions are to be morally evaluated by the criterion of conformity to reason, and scholars are agreed on this point; the distinctiveness of Finnis's reading of Aquinas lies in his interpretation of this criterion. According to Finnis, morality should be analysed in terms of acting in pursuit of the basic goods within the parameters set by the integral directiveness of practical reason.[520] Finnis recognises that Aquinas does not speak explicitly of 'reasons for action' or 'basic human goods', but he argues that these expressions nonetheless capture what Aquinas means.[521]

In two areas of Aquinas's applied ethics, in his views on the distinction between justifiable homicide and murder and in his sexual ethics, there are (as Finnis acknowledges) some inconsistencies between what St Thomas actually says and the principles of his moral theory as Finnis understands

[514] Porter, *Ministers of the Law*, p. 67 n. 11: Referring the reader to Finnis's *Aquinas* for a recent extended defence of this position.

[515] Porter, Reason, Nature and the End of Human Life, pp. 476–477.

[516] Porter, *Ministers of the Law*, p. 91, n. 37: Quoting Germain Grisez, 'The First Principle of Practical Reason: A Commentary on the Summa theologiae, 1-2, Question 94, Article 2', *Natural Law Forum*, 10 (1965) pp. 168–201.

[517] Finnis, *Aquinas*, p. 87: Quoted in Porter, Reason, Nature and the End of Human Life, p. 477

[518] Porter, Reason, Nature and the End of Human Life, p. 477.

[519] Finnis, *Aquinas*, p. 140, see also: pp. 138–140, 163–70: Quoted in Porter, Reason, Nature and the End of Human Life, p. 477.

[520] Porter, Reason, Nature and the End of Human Life, pp. 477–478.

[521] Porter, Reason, Nature and the End of Human Life, p. 478: Quoting Finnis, *Aquinas*, p. 95, n. d.

it.[522] For Aquinas, murder is intrinsically morally wrong, but this is not, as some commentators have suggested, simply because he defines 'murder' as 'wrongful killing'.[523] He distinguishes murder from justifiable homicide by means of objective criteria: killing is justified where the victim is a malefactor or enemy combatant, who forfeits his immunity from harm by some act of aggression, and the perpetrator is the state or its authorised agent or a private individual reasonably seeking to preserve her own life through self-defence. For Porter, neither the Grisez School nor their proportionalist rivals can give a plausible account of Aquinas's teaching on homicide. The difficulty for a proportionalist analysis is that, whilst Aquinas allows capital punishment and killing in wartime, he prohibits other kinds of killing that would seem, *prima facie*, to have proportionalist justifications as strong as those he allows. Most notably, he allows capital punishment whilst prohibiting the killing of a criminal by a private citizen (except in self-defence).[524] In addition, Aquinas insists that the prohibition against directly killing the innocent is absolute, where 'innocent' implies only that the individual is not guilty of or actively engaged in an act of aggression.[525] The difficulty for the Grisez School interpretation is that Aquinas explicitly says that the judge, general, or soldier *directly* intends the death of the victim.[526] Finnis argues that if Aquinas had been fully consistent, he would not have allowed for capital punishment at all and that his basic principles are consistent with the use of lethal force in wartime only where there is no direct intent to kill.[527] Hence Porter's verdict on this exchange is that:

> The debate between the proportionalists and Grisez and Finnis would seem to result in a draw, as far as this question is concerned. It is difficult to see why there might be a proportionate reason for killing a criminal or an enemy soldier, but never for killing an innocent person; on the other hand, it is equally difficult to see why the life of a criminal is inherently any less an inviolable basic good than that of a babe in arms. There is no satisfactory way out of these quandaries so long as we limit ourselves to the understanding of good and the moral evaluation of actions to be found in contemporary Catholic moral theology. But if we ask instead what criteria Aquinas uses to distinguish prohibited killing (murder, in our terms) from permissible homicides, we find that he draws the line between them in such a way as to suggest the concepts of the human good and human harm that inform his theory of justice.[528]

Finnis argues that Aquinas's treatment of self-defence lends support to his interpretation, a point that Porter concedes. However she counters that 'if Aquinas does subscribe to the general principle that we are never morally justified in acting against certain basic goods, it is odd, to say the least, that the analogy between warfare and self-defence did not occur to him. This suggests an alternative, namely, that Aquinas does not analyse morality in terms of basic human goods as Finnis

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[522] Porter, Reason, Nature and the End of Human Life, p. 478: Quoting Finnis, *Aquinas*, pp. 279–291 (on killing) and pp. 143–154 (on sexual ethics).

[523] Porter, *The Recovery of Virtue*, p. 130: Citing John Dedek, 'Intrinsically Evil Acts: An Historical Study of the Mind of St Thomas', *The Thomist* 43, (1979), pp. 385–413, at esp. pp. 407–411; Peter Knauer, 'The Hermeneutic Function of the Principle of Double Effect', *Natural Law Forum* 12 (1967), reprinted in Charles E. Curran and Richard A. McCormick, eds. *Readings in Moral Theology, No 1: Moral Norms and Catholic Tradition* (New York: Paulist Press, 1979), pp. 1–39.

[524] Porter, *The Recovery of Virtue*, p. 128.

[525] Porter, *The Recovery of Virtue*, p. 129: Quoting S.T. II-II 64, 6.

[526] Porter, 'Reason, Nature and the End of Human Life', p. 478: Quoting Finnis, *Aquinas*, pp. 279–291.

[527] Finnis, *Aquinas*, pp. 279–291.

[528] Porter, *The Recovery of Virtue*, p. 128.

understands them.'[529] On Porter's reading, there are too many aspects of Aquinas' moral theory that cannot be accommodated within the framework of the Grisez School analysis for it to stand as a persuasive exposition of Aquinas's ethics.

On Finnis's account, Aquinas's sexual ethics begins with reflection on the basic good of marriage, understood as a relationship that is intrinsically oriented towards fidelity and openness to children. Any act that violates marital exclusivity or obstructs procreation therefore involves a rejection of the basic good of marriage.[530] Finnis claims that many sexual sins are contrary to the good of marriage and 'the specifically sexual vice in morally bad sex is in every case measured by the chosen act's deviation, and the extent of the deviance, from truly marital intercourse'.[531] For Porter, 'while a case can be made that the inclination to procreate is indeed an expression of a more fundamental inclination to live and flourish, this conclusion can hardly be said to be self-evidently contained in the apprehension of the goodness of life itself.'[532] Similarly, marriage, on Porter's view 'does not even exist, much less manifest itself to a rational apprehension, apart from social construction'; hence she questions how it can count as a self-evident 'basic good' for Finnis and Grisez.[533] On Porter's reading of Aquinas, moreover, his sexual ethics cannot consistently be construed as a defence of the basic good of marriage. For Aquinas, a sexual act can deviate from right reason either (1) by being inconsistent with the end of generation and education of children, including both fornication and those acts that are 'repugnant to the natural order of the sexual act'[534] or (2) by violating the claims that one person has on another. Sexual sins of the second sort involve violations of the claims arising within a kinship structure, but these are broader than the claims generated by the marriage relationship.[535] In neither case, Porter notes, does Aquinas speak in terms of violation of the good of marriage *per se*.

For Porter, the category of sins 'against nature', including sexual sins that are repugnant to the natural order of the sexual act, is an aspect of Aquinas's moral thought that does not fit readily into the parameters of Finnis's analysis. For the Grisez School, the moral order is irreducibly distinct from natural, logical and technical considerations and moral conclusions cannot be drawn from purely factual premises. Hence, as Finnis reads him, 'Aquinas's moral arguments never run from "natural" to "therefore reasonable and right" but always from "reasonable and right" to "therefore natural".'[536] Yet, as Porter points out, Aquinas's category of sexual sins that are against nature is a clear example to the contrary. Furthermore, Aquinas clearly states that such sins are contrary to the nature that we share with other animals, in contrast to those sins that are contrary to our nature as rational creatures,[537] so if Finnis counters that, for Aquinas, 'unnatural' is just another way of saying 'unreasonable', this argument will not avail him. Likewise, in his discussion of the natural love that

[529] Porter, 'Reason, Nature and the End of Human Life', p. 478: Quoting *S.T*. II-II, 64, 7.

[530] Porter, 'Reason, Nature and the End of Human Life', p. 478: Quoting *S.T*. II-II, 64, 7.

[531] Porter, 'Reason, Nature and the End of Human Life', p. 478: Quoting Finnis, *Aquinas*, p. 153.

[532] Porter, *Nature as Reason*, p. 128.

[533] Porter, *Nature as Reason*, p. 129.

[534]Porter, 'Reason, Nature and the End of Human Life', p. 479: Quoting *S.T*. II-II, 154, 11

[535]Porter, 'Reason, Nature and the End of Human Life', pp. 478–479: Quoting *S.T*. II-II, 154, articles 6, 7, 9, 10.

[536] Finnis, *Aquinas*, p. 153, n. 91.

[537] Porter, 'Reason, Nature and the End of Human Life', p. 479: Quoting Aquinas, *Ad Romanos* 1.8; *Summa Contra Gentiles*, 3.122; De Malo 15 *ad* 7.

angels have for God, Aquinas says that the theological virtue of charity would be a perversion rather than a perfection of nature if angels and men did not naturally love God more than themselves; we know this to be true on grounds that we observe that pre-rational creatures naturally do so. However precisely we are to interpret these passages, it is clear that, for Aquinas, pre-rational nature provides reason with moral criteria.[538] For Porter, an Aristotelian philosophy of nature offers the most satisfactory way to understand the principles of practical reasoning inherent in human nature, and she parts company with Finnis and Grisez at this point.[539] For the Grisez School this 'naturalistic' construction is illicit, since they see the naturalistic fallacy as a timeless truth of logic,[540] whilst Porter construes it as a chimera of the modernist mind-set that does not render all forms of ethical naturalism unrecoverable for contemporary ethics.[541]

A further issue that Porter identifies as problematic for Finnis's interpretation of Aquinas relates to the Grisez School's concept of what Aquinas calls 'the ultimate end'. Grisez not only concedes that his vision of supernatural happiness is not Aquinas's, he attempts to refute Aquinas's argument that the true ultimate end of human beings is God alone, attained by the beatific vision.[542] Finnis, by contrast, although he observes that Aquinas frequently refers to the basic goods by the singular noun '*finis*' (end), argues that it is a mistake to translate this as '*the* end'.[543] Yet Aquinas himself says that there can only be one objective final end for human life: beatitudo, and that each person aims at one final end, subjectively identified by the agent as his or her true ultimate happiness. Although it may not in fact coincide with the true end to which all persons are called, every human act is ultimately directed towards the individual's subjective end.[544] For Finnis and Grisez, the basic human goods are irreducibly plural and happiness, or in their terms 'integral human fulfilment,' is an umbrella term for the full enjoyment of all of them. Although perfect fulfilment, for the Grisez School, cannot be fully attained without grace, everyone may aspire to imperfect flourishing in this life through acting in pursuit of basic human goods and refraining from any act that would damage or forestall any instance of such a good. Porter finds it difficult to reconcile this view with Aquinas's claim that true happiness can only consist in the direct enjoyment of God in the beatific vision. He does say that our desire for finite goods such as wealth and glory will be fulfilled in the blessed state, but he does not say that they will themselves be attained. On the contrary, he specifically says of Finnis's basic good of friendship: 'if we are to speak of the perfect happiness which will exist in the homeland, the society of friends is not required as an essential element, because the human person has the whole fullness of perfection in God.'[545] For Aquinas then, Porter argues, not only is happiness something different from the unlimited enjoyment of basic human goods, it stands in a different

[538] Porter, 'Reason, Nature and the End of Human Life', p. 479

[539] Porter, *Ministers of the Law*, p. 83.

[540] Grisez, Boyle and Finnis, Practical Principles, Moral Truth and Ultimate Ends, p. 102.

[541] Porter, *The Recovery of Virtue*, p. 43.

[542] Germain Grisez, 'The Ultimate End of Human Beings'.

[543] Porter, 'Reason, Nature and the End of Human Life', p. 480: Quoting Finnis, *Aquinas*, p. 80 n. 92.

[544] Porter, 'Reason, Nature and the End of Human Life', p. 480: Quoting *S.T.* I-II, 1, 4–6 and *S. T.* I-II, 1, 7. See also William C. Mattison, 'Can Christians Possess the Acquired Cardinal Virtues?' *Theological Studies*, 72 (2011) pp. 558–585, for discussion of the implications of the singularity of a person's last end for the virtues present in the graced life.

[545] Porter, 'Reason, Nature and the End of Human Life', p. 482: Quoting *S.T.* I-II, 4, 8.

relationship to specific goods than Finnis can allow.[546] Grisez, as we have seen, concedes this point of Thomist scholarship, but Finnis does not.

Finnis points out that on Aquinas's view we can, in this life, attain only imperfect happiness, which consists in the practice of the virtues, a point on which he and Porter agree.[547] However, Finnis takes this to imply that happiness in this life consists in the greatest possible openness to participation in the basic goods, since for him the virtues consist in dispositions to act in accordance with intelligible reasons for action. Finnis essentially equates virtue with the basic good of practical reasonableness, but for Porter this simply underscores her earlier point that this, together with complex socially constructed goods like marriage and friendship, is a good of a different order from such goods as life and knowledge, and its claim to self-evidence as a basic human good is questionable. Porter states that, to her knowledge, Aquinas nowhere claims that imperfect happiness is constituted by the enjoyment of human goods such as life, knowledge, or the society of friends. Furthermore, the virtues, for Aquinas, are not merely attitudes of openness to basic goods, they provide ordering principles for the pursuit of these goods.

As regards Finnis's assertion that allowing one's emotions sway over one's reasons for action is the paradigmatic way of going and doing wrong for Aquinas,[548] Porter emphatically denies this claim.

> The rational criterion, that is to say, the mean of the virtues of the passions, is determined by the overall good of the organism, which places sensual goods in their correct relation to that overall good.[549] Likewise the mean of justice is set by the good of the neighbour and the community as a whole, and for this reason, justice orients the will towards a good that goes beyond the good of the individual.[550] Correlatively, action out of emotion rather than reason is not presented as the paradigmatic form of sin, at least not in Aquinas's mature work; the most serious forms of sin consist in a willed choice of lesser over greater goods,[551] grounded in a false judgement about the ultimate end of one's life.[552]

In summary: Ralph McInerny and Jean Porter dispute the Grisez School reading of Thomas Aquinas, arguing that the new natural law diverges from Thomist thought at important junctures. Porter finds their reading of Aquinas unpersuasive at several points; specifically the Grisez School model of morality as the pursuit of basic human goods under the direction of practical reason is called into question as an interpretation of Aquinas's underlying theory in his discussions of homicide and of sexual ethics, where discrepancies arise that must otherwise be seen as inconsistencies in Aquinas's own corpus.[553] Porter disputes Finnis's exposition of Aquinas on natural and supernatural happiness, which on her reading cannot be equated with full enjoyment of an irreducibly plural list of basic

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[546] Porter, 'Reason, Nature and the End of Human Life', pp. 482–483.

[547] Porter, 'Reason, Nature and the End of Human Life', p. 483: Quoting Finnis, *Aquinas*, p. 106

[548] Finnis, *Aquinas*, p. 73.

[549] *S.T*. II-II, 64, 2.

[550] *S.T*. I-II, 56, 6.

[551] *S.T*. I-II, 78, 1.

[552] Porter, 'Reason, Nature and the End of Human Life', p. 483.

[553] This is in fact how Finnis accounts for the discrepancies between Aquinas's discussion of capital punishment and what he takes to be Aquinas's own fundamental principles, arguing that if Aquinas had been fully consistent he would not have allowed for capital punishment at all. Porter, Reason, Nature and the End of Human Life, p. 478: Quoting Finnis, *Aquinas*, pp. 279–291.

human goods, and on the virtues, arguing that Aquinas's theory of character cannot be reduced to the acquisition of dispositions to act in accordance with practical reason and consistently with an openness to human goods. Finally, Porter rejects Finnis's assertion that, for Aquinas, allowing one's emotions sway over one's reasons for action is the paradigmatic category of sin.

It seems clear from the foregoing that Grisez consciously departs from Thomist teaching on the ultimate good and Finnis's reading of Aquinas is called in question on several points. However, unless Porter is right in supposing that the Grisez School ethical system is simply unworkable, the new natural law as *sui generis* stands as a valuable resource for environmental ethics and, with suitable caveats attached, as a predictive tool for future Vatican teaching in the context of our ecological crisis. Hence it is to Porter's critique of the universalist pretensions and rationalistic character of Grisez's ethics that we now turn, fleshed out where necessary with reference to the work of other scholars, to examine whether the Grisez School have established a workable reconstruction of natural law theory.

Section Two: Is Grisez School ethics a species of natural law?

The term 'natural law' has various connotations; over the course of its long history it has meant different and even mutually contradictory things to different theorists.[554] We will focus here on only two of these, since they represent the most common ways in which the term is used today. For some scholars, to qualify as a species of natural law a moral theory must be universalist, a freestanding edifice constructed by reason alone. For others, the term 'natural law' implies that moral norms must be in some way derived or inferred from nature as in some sense normative.

For Göran Bexell 'a doctrine of natural law is *universalist,* containing as it does a universal claim based on empirical assumptions concerning human nature and the ethical capabilities of reason.'[555] Northcott critiques what he sees as the *rationalism* of the new natural law, preferring a 'naturalistic' version. In this regard he is in agreement with a raft of Thomist scholars who argue that the new natural law avoids any foundational reference to nature, its proponents having been 'tempted by the devil' as Henry Veatch rather colourfully suggests 'so as to seem to say that natural law doctrines are not really based on a knowledge of nature after all!'[556] As Northcott notes, for Pamela Hall their use of the term 'natural law' amounts to no more than a 'nostalgic acknowledgement of the philosophical home they have departed.'[557] Although Bexell also uses the term 'rationalistic' to describe Grisez's theory, his critique is slightly different to Northcott's, contrasting the roles of reason and emotion, conscious and unconscious drivers of behaviour. So in answer to the question 'is Grisez's ethics a species of natural law', this will clearly depend on the sense in which one is using the term 'natural law'. A further complexity is that an ethical theory can of course be 'rationalist' in

[554] For a fascinating discussion of the many different concepts of natural law, see Jean Porter 'Does Natural Law Provide a Universally Valid Morality?' in: *Intractable Disputes about the Natural Law: Alasdair MacIntyre and Critics* edited by Lawrence S. Cunningham (Notre Dame, Indiana: University of Notre Dame Press, 2009) pp. 53–95, at pp. 64, 65.

[555] Göran Bexell, 'Is Grisez's Moral Theology Rationalistic? Free Choice, the Human Condition and Christian Ethics' in: Biggar and Black (eds.)*The Revival of Natural Law*, pp. 131–147, at p. 145.

[556] Henry B. Veatch, *Swimming Against the Current in Contemporary Philosophy: Occasional Essays and Papers* (Washington, DC: Catholic University of America Press, 1990) p. 292.

[557] Pamela M. Hall, *Narrative and the Natural Law: An Interpretation of Thomistic Ethics* (Notre Dame: University of Notre Dame Press, 1994) p. 18; quoted in Northcott, 'Moral Standing of Nature', p.266.

Bexell's sense with or without departing the 'naturalistic' neo-Thomist stable in the sense that Northcott, Porter and others understand the Grisez School to have done.

Porter, as we have seen, disputes the Grisez School's interpretation of Aquinas and regards their Herculean efforts to avoid the naturalistic fallacy as unnecessary since the critiques by Hume and Moore, widely thought to have undermined the philosophical credibility of all forms of natural law, simply do not have traction against St Thomas's ethics as she understands it. She is critical of the new natural law's universalist aspirations, at times seeming to equate their theory with some form of epistemologically enclosed Kantianism, and she suggests that issues with Grisez's conception of practical reason render the theory unworkable.

For the purposes of this thesis, it is necessary to defend the Grisez School worldview as a cogent theological worldview, since if the theory is fundamentally flawed the value of my attempts to apply it to contemporary ecological problems is called in question. Hence this section aims to address the question: Is the Grisez School ethical system a viable form of natural law theory?

Universalism

On the issue of universalism, Nigel Biggar's concluding comments in *The Revival of Natural Law* are insightful.[558]

> Göran Bexell, standing in the tradition of Paul, Augustine and Luther, over against that of Aristotle and Aquinas, denies the possibility of a neutral ethical understanding (or 'reason') that is not shaped either by the presence of religious faith or by its absence. Advancing this line of criticism, Rufus Black observes that, since Finnis asserts that knowledge of the basic requirements of practical reasonableness arises, in part, from an understanding of the 'conditions of human life', different such understandings will produce different conceptions of what is practically 'reasonable'; and that *pace* Grisez, a Christian vision of those conditions does add new basic moral principles to those that are naturally knowable. Pushing the point one step further, I argue that even some of what Grisez (and Finnis) present as being elements of practical reason simply, only appear reasonable in the light of Christian faith and hope; and that therefore their 'natural morality' is actually formed by Christian presuppositions. However, as I have said, this need not mean that different anthropologies yield absolutely different ethics. On the contrary, they may well share common elements, more or less differently qualified. Nor does it mean that there is no scope for critical dialogue between different ethics, and no reason to hope for eventual (even if eschatological) consensus. What it does mean, however, is that at certain points ethical dialogue will grind to a halt unless it is willing to grapple with larger issues about the nature of human being and the universe in which it is set.[559]

[558] Although Biggar appears to misread Bexell; as I read him, Bexell favours the reconstruction of an updated universalist ethics, citing with approval the work of Scandinavian scholars challenging the fashionable particularism of our day. Bexell cites Gustaf Wingren, author of *Luther on Vocation, Creation and Law*, and *Theology in Conflict*, who was Professor of Theological Ethics in Lund, Sweden from 1951 to 1977; Ragnar Holte, Professor of Ethics in Uppsala, Sweden, from 1966 to 1992; K. E. Logstrop, author of *The Ethical Demand* (Notre Dame: University of Notre Dame Press, 1997) and Carl-Henrik Grenholm with whom he co-authored a textbook *Teologisk etik—en introduktion* in which the question of universalism versus particularism is a running theme; 'There are a number of reasons why the exaggerated particularism so fashionable in our day deserves to be challenged by an updated universalist ethics, and therefore why the doctrine of natural law needs to be refashioned in the light of today's ethical debates and problems. Grisez's moral theology is accordingly significant as one serious attempt to do just that.' Bexell, 'Is Grisez's Moral Theology Rationalistic?' p. 146.

[559] Nigel Biggar, 'Conclusion' in : Biggar and Black (eds) *The Revival of Natural Law*, pp. 292–293.

Of course, whether Grisez intends to expound a universalist ethic and whether he is successful in doing so are separate questions. As Rufus Black reads him, Grisez's natural law can function as a species of theological ethics that satisfies the criteria specified by leading Protestant scholars.[560] However he sees the common structure of practical reason that Grisez and Finnis identify as providing a useful epistemological superstructure for a bridge between Christian and other forms of ethics:

> The existence of this common structure means that where Christians and others have a shared understanding of the nature of human life, they are also likely to possess compatible ethical insights. For example, a common recognition of the finitude of life is likely to give rise to similar practical principles concerning the need to make life-plans and stand by commitments. While Hauerwas might doubt the possibility of such shared ethical insight, or suspect it of undermining the distinctiveness of Christian ethics, other leading Protestant ethicists defend the significance of such common understandings. Oliver O'Donovan, for example, considers it important to sustain this possibility that humans have 'a certain natural knowledge' which is also part of man's created endowment. Without such a possibility, O'Donovan observes, moral disagreements may simply become ultimate clashes of commitment which are incapable of resolution […] The possibility of natural knowledge sustains the claim that all people face objective moral realities.[561]

Nigel Biggar seems to interpret this aspect of Grisez's ethics as an occasional lapse rather than a conscious intention, commenting:

> Where Grisez is wrong is to suppose, as he sometimes does, that there is a coherent body of knowledge about the human good, its components and its moral implications, which is sound *per se*, and to which reason can in fact attain 'naturally'—that is, without illumination by revelation. The theory of the good and the moral law that Grisez presents as attainable 'naturally' is actually formed by specifically Christian presuppositions. It is in fact a Christian theory, formally abstracted from the theological context in which alone it makes sense. This flaw in Grisez's ethic inadvertently confirms Barth's contention that theological presuppositions radically determine the whole of a Christian ethic—although there may be isolated fragments that Christians and non-Christians share alike.[562]

Like Biggar, other scholars have found the secular universalist aspirations of the new natural law objectionable or wrong-headed. On Porter's reading, Grisez and Finnis (like Martha Nussbaum) 'hope to develop moral theories that will be universally persuasive, in accordance with content-neutral criteria for public reasonableness'.[563] As we shall see in our discussion of rationalism, at times she seems to characterise the new natural law theory as a species of Kantianism.

In her earlier work, Porter argued, *contra* Grisez, that any account of the natural law must draw on specifically theological elements in order to function prescriptively, and that we cannot 'make theoretical sense, or practical use, of the natural law in purely rational or philosophical terms, without taking the contingencies introduced by theological considerations into account'.[564] More recently, her position has shifted towards greater optimism that at the level of international law we

[560] Rufus Black, Is the New natural Law Theory Christian? in: Biggar and Black (eds.) *The Revival of Natural Law* pp. 158–160.

[561] Rufus Black, 'Is the New natural Law Theory Christian?', p. 159.

[562] Nigel Biggar, 'Karl Barth and Germain Grisez on the Human Good', p. 179.

[563] Jean Porter, *Ministers of the Law,* p. 183.

[564] Jean Porter, 'Does the Natural Law Provide a Universally Valid Morality?', p. 90.

might collectively *construct* a universal ethic, so that, although she would still claim that the natural law cannot be understood outside a theological context, she now sees the dichotomy between a theological and a philosophical account of natural law as too simplistic. Porter argues that Christian commitments to human rights and to the equal value of human persons rest ultimately on theological foundations, especially on our traditional understanding of persons as *imago dei*, 'yet it may be the case that others who do not share these commitments may still find the relevant norms attractive and persuasive, and adapt them in such a way as to appropriate them into quite different traditions of thought and practice—just as we owe more than we can know to central practices of other traditions.'[565] For Porter:

> The problem that we face, as men and women confronting one another in a context of deep moral disagreement, is not that of identifying a pre-existent moral code that will settle these conflicts in some mutually acceptable way. Rather, we are challenged to construct a set of mutually acceptable norms through processes of shared reflection and negotiation—first of all, at the level of international law, but also within the increasingly permeable boundaries of our immediate political communities. This opens up the possibility that a universal ethic may still have validity—not as something we hope to discover, but something that we might jointly construct. To some extent, I would share this hope.[566]

To sum up: on the subject of the Grisez School's universalist aspirations, Biggar takes the view that Grisez and Finnis's conception of practical reason only appears reasonable in the light of Christian faith and hope and what they occasionally present as a freestanding natural morality is actually formed by Christian presuppositions. Thus far, Black agrees with his mentor, arguing that different understandings of the conditions of human life arise from different worldviews and produce differing conceptions of what is practically reasonable. However, Black sees a positive role for Grisez's secular formulation of the new natural law, as a useful bridge to promote shared understanding in the context of religious and cultural pluralism, whereas, for Biggar, universalism appears as an occasional lapse and a flaw in Grisez School ethics. Porter, observing this flaw, worries that the whole theory is simply unworkable. However, she shares with Black the hope that we may still be able to negotiate a set of mutually acceptable norms in international law, although she doesn't see the Grisez School as having constructed a viable bridge to the realisation of this hope.

Rationalism

Is Grisez's ethics detached from nature?

A tranche of scholars who are sympathetic to the idea of natural law nevertheless critique Grisez's version of the theory as detached from nature and overly rationalist, which on their view disqualifies it as a species of natural law. Biggar asks whether the Grisez School's alleged rationalism suffers from a serious deficiency, in terms of its potential application to environmental issues, that a revival of ethical naturalism might correct, assuming the idea of natural teleology can be restored to philosophical respectability. In order to address this question we need to look more carefully at the substance of the Neo-Scholastic critique and the Grisez School's response to it.

Porter detects a contemporary revival of interest in the moral significance of human nature, including the work of philosophers motivated by recent developments in science and medicine[567]

[565] Jean Porter, 'Does the Natural Law Provide a Universally Valid Morality?', p. 91.

[566] Jean Porter, 'Does the Natural Law Provide a Universally Valid Morality?' p. 89.

[567] Porter, *Natural and Divine Law*, p. 26: She mentions Mary Midgley, Owen Flanagan and Leon Kass as examples.

and those exploring the contemporary significance of classical moral thought,[568] as well as scientists working within the rapidly expanding field of evolutionary psychology, which is built on the premise that human behaviour is at least partly intelligible as an expression of a species-specific nature that can be interpreted in terms of evolutionary adaptation.[569] Whilst the work of these scholars is highly controversial, thanks to their efforts human nature is once again a mainstream topic for moral philosophy as well as scientific enquiry. By contrast, Porter tells us:

> Until comparatively recently, this topic would have been ruled out of consideration from the outset. Most educated people believed that evolutionary theory had fatally undermined the belief that we possess any definite human nature at all. Furthermore, most philosophers assumed that David Hume and G.E. Moore had shown the logical impossibility of deriving moral conclusions from the facts of human nature, a mistake that came to be known as the naturalistic fallacy.[570]

In Porter's view, continued avoidance of the topic impoverishes both Christian ethics and the wider social discourse.[571] Christian Ethicists, Catholic as well as Protestant, have been reluctant to address the question of the moral significance of human nature, in Porter's opinion, precisely because they associate this topic with problematic pre-modern accounts of the natural law. Porter notes that:

> The widely influential 'new natural law' theory developed by Germain Grisez and John Finnis might seem to offer a counterexample to this claim. However this theory is explicitly distinguished from 'old' natural law theories by the fact that it does not attempt to derive moral conclusions from observations about nature.[572]

Porter disputes the Grisez School's stance on the naturalistic fallacy, concluding that there is no compelling justification for their reconstruction of the requirements of practical reason, which they justify as the only way of avoiding fallacious reasoning from purely factual premises to normative conclusions.[573] She acknowledges that the Grisez School theory stands as a major challenge to her own thesis that reason underdetermines moral norms at least at a level sufficiently concrete to be put into practice.[574] However, the difficulties she sees as being raised by the rationalism of the new natural law lead her to conclude that pure practical reason is no more promising than her own preferred naturalistic approach, whatever its promises and limitations, as a basis for a theory of morality.[575]

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[568] Porter, *Natural and Divine Law*, p.26. Mentioning Martha Nussbaum, John Casey and Julia Annas.

[569] Porter, *Natural and Divine Law*, p.26 n. 2: For a good summary and critical assessment of the relevant literature, see Stephen J. Pope, *The Evolution of Altruism and the Ordering of Love* (Washington D.C.: Georgetown University Press, 1994), pp. 99–127; for a survey of more recent work, see Galen Strawson, 'In Deepest Sympathy: Towards a Natural History of Virtue', *Times Literary Supplement*, 29 November 1996, pp. 3–4.

[570] Porter, *Natural and Divine Law*, p. 26. n. 1: The relevant texts are David Hume, *A Treatise of Human Nature*, L.A. Selby-Bigge, ed. (Oxford: OUP, 1888), p. 469, and G.E. Moore, *Principia Ethica* (Cambridge: Cambridge University Press, 1903, repr. 1948), pp. 46–58.

[571] Porter, *Natural and Divine Law*, p. 27.

[572] Porter, *Natural and Divine Law*, p. 27.

[573] Porter, *Nature as Reason*, p. 130.

[574] Kekes observes that the same is true for nature, a point Porter concedes. Porter, *Nature as Reason*, p.126–127: Citing John Kekes, 'Human Nature and Moral Theories', *Inquiry* 28 (1985) pp. 231–245, at p. 244.

[575] Porter, *Nature as Reason*, pp. 130–131.

As we have seen, Porter herself argues that a naturalistic account of Aquinas's theological ethics remains philosophically coherent and viable as a contemporary moral theory because she takes the naturalistic fallacy to be an artefact of Enlightenment thought,[576] which has no traction against Aquinas's natural law because it is based on an Aristotelian philosophy of nature[577] which offers the most satisfactory way to understand the principles of practical reason.[578] As Porter observes:

> The arguments of Hume and Moore were developed within the context of Enlightenment foundationalism, and as such have been shaped by a presupposition well described by John McDowell: 'Modern philosophy has taken itself to be called on to bridge dualistic gulfs, between subject and object, thought and world.'[579] In the case at hand, appeals to a naturalistic fallacy presuppose a gulf between the factual and the normative, and insist that this gulf cannot be bridged, with the consequence that moral arguments must be in some way self-standing, based on sentiments (as Hume claims), or nonnatural properties attaching to states of affairs (according to Moore) or some other distinctive and nonfactual basis, which nonetheless mirrors the objectivity of the factual in some way. Throughout the past century the very existence of such a gulf has been challenged on a number of grounds [...] and the persuasiveness of 'naturalistic fallacy' arguments has correspondingly been undermined.[580]

For Porter, re-establishing the ethical credibility of a naturalistic approach allows her to recover an Aristotelian-Thomist theory for contemporary Christian ethics which, on her analysis, relies on a more plausible as well as a more authentically Thomist concept of practical reason. Porter has three objections to the Grisez School position on the operation of moral reasoning. Firstly, Grisez and Finnis justify their construction of practical reason 'on the grounds that only on their analysis can practical reason avoid illegitimate inferences from states of affairs or metaphysical claims to moral judgements.'[581] As such they offer a good illustration of McDowell's observation that:

> Ordinary modern philosophy addresses its derivative dualisms in a characteristic way. It takes a stand on one side of a gulf it aims to bridge, accepting without question the way its target dualism conceives the chosen side. Then it constructs something as close as possible to the conception of the other side that figured in the problems, out of materials that are unproblematically available where it has taken its stand. Of course there no longer seems to be a gulf, but the result is bound to look more or less revisionist.[582]

Porter agrees with McDowell that there is no such gulf, and hence no compelling reason for what she calls 'the radically new structure of practical reasoning that Grisez and Finnis have proposed.'[583]

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[576] Porter, *The Recovery of Virtue*, p. 43: See note 43 above.

[577] She defends this approach at length in: Porter, *Nature as Reason*, pp. 82–103.

[578] Porter, *Ministers of the Law*, p. 83.

[579] McDowell, *Mind and World*, p. 93.

[580] Porter, *Nature as Reason*, p. 124, n 95: Referencing A.N, Prior, *Logic and the Basis of Ethics* (Oxford: OUP, 1949); Julius Kovesi, *Moral Notions*, (London: Routledge and Kegan Paul, 1967), especially pp. 37–65; Charles Pigden, 'Logic and the Autonomy of Ethics', *Australian Journal of Philosophy* 67, 2 (1989): pp. 127–151; Pigden, 'Naturalism', in: *A Companion to Ethics* ed. Peter Singer (Oxford: Blackwell Press, 1993), pp. 421–431; Anthony J. Lisska, *Aquinas's Theory of Natural Law: An Analytical Reconstruction,* (Oxford: Clarendon Press, 1996), pp. 195–201.

[581] Porter, *Nature as Reason*, p. 130.

[582] Porter, *Nature as Reason*, p. 130, n. 101: Quoting John McDowell, *Mind and World*, (Cambridge: Harvard University Press, 1994) p. 94.

[583] Porter, *Nature as Reason*, p. 130.

Furthermore, as we have seen,[584] the difficulties Porter identifies as being raised by the Grisez/Finnis theory of natural law suggest, at minimum, that 'pure reason' is no more promising than 'pure nature' as a basis for a theory of morality[585] and, this being the case, whatever the advantages and disadvantages of her own preferred naturalistic approach, Porter finds no justification for the claim that a moral theory grounded in reason provides us with a clear alternative, and several positive reasons for taking a naturalistic ethic seriously as a starting point for developing a theological account of the natural law.[586]

Secondly, Porter objects that the Grisez School construction of practical reason flies in the face of ordinary experience:

> In order for their theory to work, Grisez and Finnis must not only show that these principles capture the way in which practical reason works, when it is functioning correctly; they must also show that these principles express the way practical reason necessarily must work when it is functioning in good order. And it is difficult to see how this case could be made, if only because we do not reason about practical matters in the way that Finnis and Grisez suggest we do. We desire and seek objects or states of affairs, and these are desirable to us because they fit into ongoing needs, desires, projects and long-standing commitments, whether our own or those of people, communities, or ideals toward which we are committed. Even if these desiderata could be analysed without remainder into a set of basic goods (and this is not apparent), we do not desire them simply as instantiations of basic goods; we desire them because they promote the overall wellbeing of people and other entities about which we have some concern, or avert harm from them. By the same token, we inevitably find ourselves weighing different desiderata against one another in the light of our overall concerns and commitments and this process will on occasion lead us to act against some goods, precisely in order to preserve other weightier or more urgent desiderata.[587]

Thirdly, as we have seen, Porter disputes the Grisez School construction of practical reason as an accurate exposition of Aquinas. Finnis, she tells us, recognises that Aquinas does not speak explicitly of 'reasons for action' or 'basic' human goods, but nonetheless maintains that these expressions capture what Aquinas means. Porter disputes this, countering that:

> When Aquinas speaks of reason in a moral context, he interprets it in terms of a correct ordering in view of some higher end: 'this pertains to right reason, that one should make use of those things which lead to an end in accordance with the measure which is appropriate to the end.'[588]

Furthermore, although Aquinas does not claim that such goods as life and knowledge are instrumental in a narrow sense, On Porter's account he does claim that we bring order to our pursuit of these and similar goods through our grasp of the end of human life,[589] which, as Porter interprets him, cannot be equated with the unlimited enjoyment of irreducibly plural basic human goods, and stands in a different relationship to specific goods than Finnis can allow. For Finnis, as Porter understands him, happiness is secondary to the basic human goods which, since they are not

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[584] See n. 71 above.

[585] Porter, *Nature as Reason*, pp. 130–131.

[586] Porter, *Nature as Reason*, pp. 130–131; Porter's positive reasons for her preferred naturalistic approach are discussed on pp. 131–136.

[587] Porter, *Nature as Reason*, pp. 129–130.

[588] Porter, 'Reason, Nature and the End of Human Life', p.483: Citing *S.T.* II-II, 152, 2.

[589] Porter, 'Reason, Nature and the End of Human Life', p.482–483: Citing *SCG* 3.25; *S.T.* I-II, 1, 6.

instrumental or derivative, cannot be dependent in any way on some more fundamental or higher-order good for their desirability.[590]

Ordering, comparative judgements, and preferential choices are integral aspects of practical reasoning as we experience it,[591] Porter argues, and whilst no one would deny that, for Aquinas, actions are to be morally evaluated by the criterion of conformity to reason,[592] Finnis and Grisez's interpretation of this criterion is not persuasive as an account of St Thomas's position. As we have seen, in Porter's view there are too many aspects of Aquinas's moral theory that cannot be accommodated within the framework of the Grisez School analysis, which suggests that St Thomas simply does not analyse morality in terms of basic goods as the Grisez School understand them.[593]

Porter offers an alternative reading of Aquinas: on her analysis his theory of moral goodness presupposes a theory of goodness in general,[594] hence, for Porter:

> There is nothing mysterious or even distinctive about our knowledge of good and evil, on the contrary, our knowledge of what is good for a thing is of a piece with our knowledge of what that thing is. To the extent that we know what something is we can judge how nearly it approaches to the ideal of its kind of creature, and in which ways it falls short of that ideal. If we know enough about the creature and its usual mode of existence, we can even offer suggestions about what would promote its nearer approach to the ideal state of existence proper to its specific kind, and conversely, what would be harmful to it.[595]

So for Aquinas, as Porter understands him, there is no gulf to be bridged between the empirical and the normative realms: there can be no understanding of the facts that specify our understanding of what a particular biological species *is* and our grasp of the good peculiar to its natural kind. Furthermore, in our own case, our knowledge of what we ought to be, which includes moral knowledge, is a necessary part of our knowledge of what we are. Hence, Porter concludes, according to Aquinas's theory of morality the moral 'ought' cannot be separated from the anthropological 'is'.[596]

Porter's interpretation here contradicts Grisez's reading of Aquinas on the first principle of practical reason,[597] which Finnis adopted in *Natural Law and Natural Rights*,[598] and which underpins the further development of their moral theory. On the Grisez School account, Porter explains:

> Aquinas holds that both the first principles of practical reason, and the knowledge of the basic goods that give substantive content to those principles, are self-evident and therefore underived (although not innate in the sense of being known prior to all experience). Hence according to Grisez and Finnis, Aquinas holds that moral knowledge does not presuppose factual knowledge or metaphysical theories

[590] Porter, 'Reason, Nature and the End of Human Life', p.483

[591] Porter, *Nature as Reason*, p. 130.

[592] Porter, 'Reason, Nature and the End of Human Life', p.477: See n. 21 above.

[593] Porter, 'Reason, Nature and the End of Human Life', p. 478.

[594] Porter, *The Recovery of Virtue*, p. 36.

[595] Porter, *The Recovery of Virtue*, p. 43.

[596] Porter, *The Recovery of Virtue*, p. 44.

[597] Porter, *The Recovery of Virtue*, p. 44, citing Germain Grisez, 'The First Principle of Practical Reason'.

[598] Porter, *The Recovery of Virtue*, p. 44, citing John Finnis, *Natural Law and Natural Rights*, pp. 36–48.

> of any sort whatever, but can be derived entirely from self-evident principles and our knowledge of the basic goods, which is also self-evident to us.[599]

Porter notes that Grisez, in his later work, does not claim to be following Aquinas on every issue,[600] as we have seen, but both he and Finnis continue to hold that on this basic point they are in agreement with St Thomas and their interpretation of his thought on practical reason is correct.[601] Grisez, Porter suggests, seems to insist on this point partly to correct earlier readings of Aquinas which represent him as holding that moral norms are derived by means of deduction from statements about human nature or God's will; thus far she agrees with him. Aquinas, on Porter's reading as well as Grisez's, does not hold that the primary form of moral reasoning is deductive.[602] For the Grisez School, a comprehensive system of moral principles may be derived from an indubitable first principle, as specified through the apprehension of self-evident basic goods. The process of derivation is one of specification rather than deduction, but this process does yield definite moral rules which can approach, without fully attaining, the rationally compelling character of the first principle of practical reason and the basic goods.[603] But Porter parts company with the Grisez School, and other attempts to develop an account of the natural law on broadly Thomist lines, at the point where they reject any appeal to human nature, broadly construed, as a starting point for ethical reflection.[604] For Porter such theories are unpersuasive as a reading of Aquinas, unnecessary as a response to the naturalistic fallacy and both restrictively rationalist and ultimately unworkable as an account of moral reasoning.

As a consequence of their stance on the naturalistic fallacy, Porter argues, Grisez and Finnis are forced to deny the moral relevance of all those aspects of our humanity that we share with other animals.[605] Aquinas, by contrast, says that reflection on animal behaviour can help to establish which, out of a spectrum of human desires and inclinations, should be considered normative: 'the natural inclinations in those things devoid of reason indicates the natural inclination belonging to the will of an intellectual nature'.[606] On Porter's account, no Scholastic would interpret reason in such a way as to drive a wedge between the pre-rational aspects of our nature and reason; they always presuppose an essential continuity between what is natural and what is rational, since for them nature itself is an intelligible expression of Divine reason. In particular, the pre-rational components of human nature have their own intelligible structures, in virtue of which they provide starting points and parameters for the exercise of practical reason.[607]

This difference at the theoretical level does have ramifications in applied ethics. Although Porter does not address the possibility that their theoretical structure may be hostile to environmental

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[599] Porter, *The Recovery of Virtue*, p. 44.

[600] Porter, *Ministers of the Law*, pp. 38–39.

[601] Porter, *The Recovery of Virtue*, p.44.

[602] Porter, *The Recovery of Virtue*, p. 45.

[603] Porter, *Nature as Reason*, p. 39, n. 61: 'As George points out, it is a mistake to assume that the specific conclusions of the natural law share in the same rational certainty as the first principle of practical reason and the norms through which it is specified; see Robert George, *In Defence of Natural Law*, p. 45.

[604] Porter, *Ministers of the Law*, p. 83.

[605] Porter*, Natural and Divine Law*, p. 93.

[606] Porter, *Natural and Divine Law*, p. 94: Quoting *S.T.* I, 60.5.

[607] Porter*, Natural and Divine Law*, p. 93.

ethics, as Northcott alleges, in the contentious field of sexual ethics she notes that their stance on the naturalistic fallacy requires the Grisez School to construct their defence of the traditional Catholic prohibition of the use of contraception as a sin against life, which represents the same stance of the will as is present in murder, rather than as a violation of the natural processes of sexuality.[608] Porter notes that their reasoning here is different to the arguments set out in the magisterial documents that established the doctrine,[609] and different from earlier Modern theories which reflected the assumptions of the natural theology that emerged in the seventeenth century and dominated scientific as well as religious thought for the next two hundred years.[610] On this view, Porter tells us:

> The world, and more particularly living creatures, reflect God's intelligent design, in just the same way as the design of an artefact reflects the design of the craftsman. On first glance, this might seem to be nothing more than a variant of the scholastic view that creatures reflect an intelligibility and goodness in virtue of their essential forms. But on the modern view, the intelligibility of creatures is understood by reference to an inferred design which is external to the creature itself. What this meant, practically, was that design was analysed in terms of the manifest functions of organs and physical processes, which were taken to be their purposes without any necessary reference to the overall well-being of the organism. The eye is meant for seeing because it is what eyes do, and the intelligent design of the eye is therefore manifested in the physical constitution of the organ, in terms of which it functions as it does.[611]

Porter argues that the scholastic approach, by contrast, is closer to what Richard McCormick calls 'personalism': it is the wellbeing of the human person in all facets and dimensions that is the criterion of moral normativity,[612] rather than the biological function of an isolated organ being elevated to the status of moral determinant at the expense of other legitimate human interests, an approach labelled 'biologism' by John Courtney Murray.[613] Biologism, Porter tells us, confuses the natural with the primordial. On the scholastic view, as Porter reads them, the goodness of a creature is inextricably bound up with its intelligible form, which is to say, with the ordered functioning proper to its natural kind, and the functions of organs are interpreted teleologically, in light of their contribution to the overall wellbeing of the creature itself or of its family, social group or species. On this account, Porter argues, 'God's will as expressed through human nature cannot be analysed in terms of the functions of the specific organs or faculties, it must be understood in terms of the overall functioning and wellbeing of the human creature and humankind, considered in the first instance as expressions of God's will that the creature live and flourish.'[614] This being the case, she concludes, a theological account of the natural law must proceed by way of reflection on the

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[608] Porter*, Natural and Divine Law*, p. 93.

[609] Porter, *Natural and Divine Law*, p. 31 n. 75: Citing Germain Grisez, Joseph Boyle, John Finnis and William May, 'Every Marital Act ought to be Open to New Life: Towards a Clearer Understanding', *The Thomist* 52.3 (July 1988), pp. 365–426.

[610] Porter, *Nature as Reason*, p. 137.

[611] Porter, *Nature as Reason*, p. 137.

[612] Porter, *Nature as Reason*, p. 138, n. 108: Quoting Richard McCormick, 'Human Sexuality: Towards a Consistent Ethical Method', in: *One Hundred Years of Catholic Social Thought: Celebration and Challenge*, ed. by John A. Coleman, S.J., pp. 189–197 at p. 191.

[613] Porter, *Nature as Reason*, p. 138: Citing John Courtney Murray S.J., *We Hold These Truths* (New York: Sheed and Ward, 1960), p. 296.

[614] Porter, *Nature as Reason*, pp. 138–139.

meaning of human flourishing[615] and in this at least she is in agreement with Grisez and his collaborators.[616]

As Porter reads them, Grisez and Finnis share in the modern view that nature, understood as whatever is pre or non-rational, stands in contrast to reason; this is implied by their insistence that moral norms must be derived from reason alone, that is, from pure rational intuitions that are in no way dependent on empirical or metaphysical claims about the world. As we have seen, however, Porter insists that neither Aquinas nor any of the scholastics would interpret reason in such a way as to drive a wedge between the pre-rational aspects of our nature and rationality.[617] This distinction, between the 'new natural law' and scholastic accounts cannot be brought out, she tells us, simply by a comparison of relevant texts on natural law and reason.[618] However, we should be wary of pressing the similarity between the scholastic emphasis on the rational character of the natural law and the Grisez reconstruction too far. For example, there is some similarity between Albert's view and the Grisez School theory since according to both the natural law is in some sense self-evident, but for Albert it is basic moral terms rather than basic goods which provide the starting points for practical deliberation:[619]

> According to Grisez, Finnis and their collaborators, the natural law rests on a self-evident first principle of practical reason: 'the good is to be done and pursued; the bad is to be avoided', interpreted in the light of the basic goods, which in turn give rise to self-evident principles of the form: 'Such-and-such a basic good is to be done and/or pursued, protected, and promoted. This is not what Albert says, however. Rather he claims that the wrongness of certain kinds of actions (for example, stealing or adultery) is self-evident to us as soon as we learn the meanings of the words designating them.[620]

For Porter the Grisez School formulation of the new natural law is over-reliant on claims to self-evidence that she finds implausible.[621] She questions the claim of their basic human goods to basicness in the required sense: the particular internal specifications of the substantive goods, such as the basic good of life which for the Grisez School includes procreation,[622] jeopardise their claim to self-evidence, whilst the contingency of the reflexive goods such as integrity, practical reasonableness, friendship and marriage on the normatively freighted cultural context in which they exist and are experienced, throws into question their characterisation as pre-moral goods as well as their status as self-evident to pure practical reason.[623] In order for their theory to work, Porter

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[615] Porter, *Nature as Reason*, p. 139.

[616] Porter, *Nature as Reason*, p. 137, where she specifically distinguishes Grisez and Finnis from those Modern theorists who followed arguments for intelligent design of specific organs and physical processes to the normative conclusions of ethical biologism.

[617] Porter, *Natural and Divine Law*, p. 93: See n. 101 above.

[618] Porter, *Natural and Divine Law*, p. 93.

[619] Porter*, Nature as Reason*, p. 247.

[620] Porter, *Natural and Divine Law*, p. 92.

[621] Porter, *Nature as Reason*, p. 128.

[622] 'While a case can be made that the inclination to procreate is indeed an expression of a more fundamental inclination to live and flourish, this conclusion can hardly be said to be self-evidently contained in the apprehension of the goodness of life itself. On the contrary, it requires a metaphysical argument […] precisely the kind of argument Grisez and Finnis reject as a basis for moral conclusions.' Porter, *Nature as Reason*, p. 128.

[623] Porter, *Nature as Reason*, pp. 128–129.

argues, it would be necessary for the Grisez School to (1) establish the claim of their basic goods to self-evidence, a case she does not believe they have made persuasively, (2) to exorcise appeals to anything beyond practical reason in pursuit of these basic goods from the process of moral reasoning and (3) to assert the incommensurability of the goods, since it is necessary to their claim to maintain the disjuncture between the realms of fact and value that moral norms are not illegitimately derived from anthropological or metaphysical premises.[624] Furthermore they must establish the transparency to unaided practical reason of the eight modes of responsibility, 'including, most notably, modes which rule out any kind of activity which impedes a basic good from coming about or damages or destroys an instantiation of such a good.'[625]

On Porter's view the inner logic of the Grisez School reconstruction of natural law overstrains the capacity of unaided reason to do the requisite work and they overstate the claims of their particular listing and internal specification of the basic goods to self-evidence. The perceived need to negotiate a route around the naturalistic fallacy which Porter sees as requiring this over-reliance on self-evidence underpins the modern epistemological turn that continues to colour both Grisez School ethics and that of their Proportionalist rivals. Catholic moral theologians on both sides of the debate, she tells us, share a conviction that moral norms are to be analysed in terms of the basic goods to be pursued through moral action, disagreeing primarily over what is to count as 'acting against' a basic good. Furthermore, both sides agree that the natural law is to be understood as a morality of reason which can be grasped by all rational and well-disposed persons.[626] Thus, on Porter's view, the thinking of both the Grisez School and their interlocutors in contemporary Catholic natural law theory reflects the assumptions and concerns of modern moral thought more generally.[627]

Porter detects a shift in emphasis between the early modern period, during which the natural law was grounded in an account of the aims and the overall order manifested in pre-rational nature, and later modern accounts which retained the commitment to universal cogency as the standard of rationality, but in order to do so were forced to choose between the naturalness of the natural law and its rational character. Almost without exception, Porter tells us, the later modern Catholic theorists chose to emphasise the rational character of the natural law, since, by the beginning of the twentieth century, medieval constructions of nature were widely regarded as untenable, the biologism inherent in arguments from biological function to moral purpose increasingly seemed arbitrary and unreasonable, and the gulf between the realms of fact and value had come to seem unbridgeable.[628] However, Porter notes:

> Very few Catholics have been prepared to reject the idea of a natural law altogether. For this reason when we examine early twentieth century accounts of the natural law, we find they agree, with few

[624] Porter, *Nature as Reason*, p. 129.

[625] Porter, *Nature as Reason*, p. 129: Quoting Grisez, *Christian Moral Principles* pp. 205–228. The eight modes are summarised at pp. 225–226.

[626] Porter, *Nature as Reason*, p. 39: Quoting Richard McCormick and Charles Curran: 'From the viewpoint of moral theology or Christian Ethics, anyone who admits human reason as a source of moral wisdom adopts a natural law perspective.' Charles E. Curran and Richard A. McCormick S.J., 'Foreword' in: Curran and McCormick (eds.), *Natural Law and Theology*, (Mahwah, New Jersey: Paulist Press, 1991) p. 1.

[627] Porter, *Nature as Reason*, pp. 30–40.

[628] Porter, *Nature as Reason*, p. 34.

> exceptions,[629] on a construal of the natural law tradition which emphasises the rational character of the natural law and minimises or even denies the normative significance of nature, except insofar as human nature is simply equated with rationality.[630]

Porter situates the Grisez School reconstruction of natural law in the context of this historical development as 'the most comprehensive expression of the approach to the natural law that emphasises its rational character',[631] and she characterises Grisez School natural law as 'very much a natural law theory in the modern mode, since it claims to derive a comprehensive system of moral precepts from an indubitable first principle.'[632] She notes the similarities between Grisez School rationalism and a Kantian approach:

> The new natural law developed by Grisez and Finnis and their followers analyses moral norms in terms of the exigencies for the rational pursuit of basic goods, which provide the self-evident starting points for all practical deliberation. This might seem at first glance to be a desire-based and therefore instrumentalist account of morality, but Grisez and Finnis are careful to point out that the starting points for rational reflection are not provided by our desires in themselves, rather these desires provide the necessary occasions for the rational apprehension of certain desiderata as basic goods, and it is these rational apprehensions, rather than the desires occasioning them, which serve as the starting points for practical deliberation. Indeed, according to Finnis, 'allowing one's emotions sway over one's reasons for action is indeed the paradigmatic way of going and doing wrong.' As Alan Donagan points out, this account of rationality, according to which moral norms are grounded in respect for the basic goods instantiated in persons' lives, is very similar to the Kantian view that moral norms are grounded in respect for rational agents *tout court*.[633]

Sometimes Porter seems to be suggesting that the new natural law might be read as a species of Kantian ethics, whereas elsewhere she apparently regards Grisez School ethics as *sui generis*: for example, in her discussion of Albert's conception of morality she comments that 'his theory has some affinities with the Kantian conception of the natural law developed by Grisez and Finnis'[634] (although as we have seen this similarity should not be pressed too far), however later in the same book, Porter argues that an analysis of morality in terms of the intention of the agent yields 'some version of Kantianism, or a theory akin to the new natural law defended by Grisez and Finnis',[635] suggesting that she does not consistently characterise the Grisez School theory as a species of Kantianism. Elsewhere, Porter clarifies that the pursuit of basic goods is 'not straightforwardly equivalent to the Kantian imperative of respect for persons, as it would be understood by most

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[629] The one major exception being Jacques Maritain, who asserts the metaphysical foundations of the natural law, but even he, Porter tells us, does not claim that moral precepts can be derived, in any straightforward way, from reflection on the normative significance of human nature. Porter, *Nature as Reason*, pp. 36–37, Citing Jacques Maritain, *Man and State*, (Chicago: University of Chicago Press, 1951).

[630] Porter, *Nature as Reason*, p. 35.

[631] Porter, *Nature as Reason*, p. 37.

[632] Porter, *Nature as Reason*, p. 39.

[633] Porter, *Nature as Reason*, p. 236–237, n. 8: Citing Alan Donagan, *The Theory of Morality* (Chicago: University of Chicago Press, 1977), pp. 60–66 and noting that Daniel Westburg likewise identifies a Kantian strain in the Grisez/Finnis theory, but correctly disassociates this approach from Aquinas's conception of prudence; see: Daniel Westburg, *Right Practical Reason: Aristotle, Action and Prudence in Aquinas* (Oxford: Clarendon, 1994), pp. 10–11.

[634] Porter, *Nature as Reason*, p. 247.

[635] Porter, *Nature as Reason*, p. 279.

philosophers'.[636] Porter tells us that in Grisez's own view his first principle of morality is an enhancement of Kant's imperative, in that 'never turn directly against basic goods' says what 'respect the dignity of every person' says and more. The basic goods, for Grisez, participate in the dignity of persons. In acting out of love for human persons one acts to promote and protect basic goods, which are the intelligible aspects of the fulfilment of persons to which human actions can contribute.[637]

Northcott, as we have seen in Chapter Four, takes issue with what he sees as an ecologically hostile rationalism at the heart of Grisez School ethics. Northcott argues that:

> In their attempt to concur with post-Enlightenment philosophy, Finnis and Grisez make a virtue out of necessity, and present an entirely deontological, non-naturalistic and non-metaphysical account of natural law. Like their utilitarian and deontological conversation partners, they present a theory of ethics which avoids any foundational reference to nature. As Pamela Hall puts it, they present us with a theory of 'natural law without nature.' […] Veatch suggests that one who contends, as Finnis does, that the norms referred to in a theory of natural law should not be taken as based on judgements about nature 'must surely be an opponent of natural law doctrines in ethics, not their defender!'[638]

Veatch faults the Grisez School for erecting a 'wall of separation between practical reason and theoretical reason, between ethics and metaphysics, between nature and morals, between *is* and *ought*'.[639] On his reading, Grisez and Finnis maintain the 'absolute independence of ethics as over against metaphysics, or of morals with respect to a knowledge of nature' so that ethical principles are not thought of as being 'in any sense principles of being or nature at all.'[640] Thus for Veatch, whatever its merits, Grisez's ethics cannot claim to be a species of natural law theory.

Russell Hittinger critiques Grisez's theory as exhibiting a 'failure to interrelate systematically practical reason with a philosophy of nature' and he asserts that the idea of natural law 'obviously requires a commitment to law as in some sense "natural" and nature as in some way normative.'[641] Similarly, Lloyd Weinreb argues that Grisez constructs a deontological theory, detached from any foundational metaphysics in contrast to 'ontological' classical and mediaeval natural law. Ralph McInerny, in the first edition of his *Ethica Thomistica*, asserts that Finnis and Grisez hold a 'Humean' view of practical reason, which takes knowledge of the world to be irrelevant to practical

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[636] Jean Porter, '"Direct" and "indirect" in Grisez's moral theory', *Theological Studies*, 57(4), 1996, pp. 611–632. http://cdn.theologicalstudies.net/57/57.4/57.4.2.pdf [accessed 21 October 2015]: attributing this point to Donagan, *The Theory of Morality* pp. 64–65.

[637] Jean Porter, '"Direct" and "indirect" in Grisez's moral theory', Quoting Grisez, Boyle and Finnis, *Practical Principles*, p. 133; Germain Grisez, 'Against Consequentialism', *American Journal of Jurisprudence* 23–24 (1978–1979) pp. 21–72, at p. 71; Germain Grisez, 'Towards a Consistent Natural Law Ethics of Killing', *American Journal of Jurisprudence* 15 (1970) pp. 64–96, at p. 69.

[638] Northcott, 'Moral Standing of Nature', pp. 265–266; Citing Hall, *Narrative and the Natural Law,* p. 18; Veatch, *Swimming Against the Current*, p. 294.

[639] Henry Veatch, 'Natural Law and the Is—Ought Question', *Catholic Lawyer* 26 (1981), pp. 251–265, at p. 265.

[640] Henry Veatch, 'Natural Law', p. 256.

[641] Russell Hittinger, *A Critique of the New Natural Law Theory* (Notre Dame, Indiana: University of Notre Dame Press, 1987), p. 8.

reasoning.[642] As Robert George remarks 'any theory that merits identification with the practical philosophy of David Hume cannot plausibly be counted as a natural law theory.'[643]

Responding to critics in defence of the new natural law, Robert George insists that Grisez and his collaborators never deny that morality is grounded in nature and furthermore that their solution to the naturalistic fallacy, which requires the claim that moral norms are not deduced or inferred from prior knowledge of human nature, does not entail the proposition that morality is not grounded in nature:

> If Grisez and his followers are correct in supposing that the most basic reasons for action are not inferred from propositions about human nature but are instead self-evident, does that mean that these reasons (and the moral norms whose derivation they make possible) are detached from human nature? The answer is no. Here is why: only that which is understood to be humanly fulfilling can be understood to be worthwhile. Intrinsic goods are basic reasons for action precisely because they are (intrinsic) aspects of human wellbeing and fulfilment. They perfect human beings, i.e., beings with a human nature. As human perfections 'basic goods' belong to human beings as part of their nature.[644]

Rufus Black tells us that the reason everyone will arrive at the Grisez School list of basic goods and no other, if they follow Finnis's methodology for themselves, is that the different goods correspond to different dimensions of human nature. For Black:

> This correspondence indicates that the foundations of moral reasoning are grounded in the reality of human nature, although the logical process for identifying these foundations has not involved deriving them from the facts about human nature to which they correspond. The nature of practical reasoning's 'grounding' in the reality of human nature is particularly apparent, if one considers the way in which the basic human goods would be different. For example, if human beings were not, in fact able to feel emotions—like the Vulcans in Star Trek(!)—'inner harmony' would never be a reason for justifying why we do what we do.[645]

Or as John Finnis puts it:

> Propositions about primary human goods are not derived from propostions about human nature or from any other propositions of speculative reason; as Aquinas says with maximum clarity, and never wavers from saying, they are *per se nota* and *indemonstrabilia*. For we come to know human nature by knowing its potentialities, and these we know by knowing their actuations, which in turn we know by knowing their objects—and the objects […] are precisely the human goods […] But […] if we shift from the epistemological to the ontological mode, the same methodological principle, in its application to human beings, presupposes and thus entails that the goodness of all human goods (and thus the appropriateness, the *convenientia*, of all responsibilities) is derived from (i.e., depends on) the nature which, by their goodness, those goods perfect. For those goods—which as ends are the *rationes* of practical norms or 'oughts'—would not perfect that nature were it other than it is.[646]

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[642] Ralph McInerny*, Ethica Thomistica* (Washington DC: The Catholic University of America Press, 1982) pp. 54–55.

[643] Robert George, *In Defence of Natural Law*, p. 84.

[644] Robert George, *In Defence of Natural Law*, p. 86.

[645] Black*, Introduction*, p. 7.

[646] John Finnis, 'Natural Inclinations and Natural Rights: Deriving "Ought" from "Is" According to Aquinas' in: L.J. Elders and K. Hedwig (eds.) 'Lex et Libertas,*' Studi Tomistici*, 30 (Vatican City: Pontificia Accademia di S. Tommaso, 1987) pp. 45–47.

So there seems to be a sense in which Grisez School ethics is grounded in nature, but, as we have seen from our engagement with Porter's critique, the differences between Thomist and Grisez School conclusions at the level of applied ethics, generated by deeper theoretical issues, can be profound. However, before embarking on a discussion of the ramifications of this conclusion for environmental ethics we need to consider the question as to whether the new natural law is 'rationalist' in a different sense: Does Grisez School ethics exclude emotional data in its moral analysis, as Bexell argues?

The Moral Significance of Emotion

Bexell joins with Northcott and a number of other scholars in critiquing the rationalism of the new natural law, but for him the Grisez system is called into question by Freud's theory of the unconscious. As Bexell points out, 'an ethical system having at its heart freedom of choice, free will and rational reflection will in most cases end up in the vicinity of rationalism.'[647] However, he makes a useful distinction between rational and rationalistic ethics:

> A rational ethic is based on rational considerations and is logically consistent; it's opposite is an irrational ethic. That ethics ought to be rational, few would contest. A rationalistic ethics, on the other hand, allows only the reason to determine moral theology, at the expense of other human spiritual capabilities and other ethical phenomena; and it may well presuppose an Aristotelian view of human being as specifically rational. In such a system, feelings, will or intuition should not override reason as they may in a rational ethic.[648]

Bexell, as a Lutheran scholar, questions the optimism of Aristotelian and Thomist anthropology and in his view Grisez oversimplifies the moral implications of evil.[649] He is critical of Grisez's treatment of the emotions, which he sees as closed to the possibility that emotions may be a rich source of moral knowledge, rather than mere elemental urges that need to be overcome through rational moral deliberation.[650]

Rufus Black, by contrast, sees Grisez's treatment of vocational choices as indicative of an affirmation of emotions and feelings as morally important data to be incorporated in rational decision making. Black sees in this a substantial point of contact with the virtue ethics of Stanley Hauerwas, since it is an important concern of virtue theorists that emotions and feelings be given an appropriate positive place in moral theory. On Black's reading:

> According to the Grisez School, all decisions, moral and immoral, involve feelings (which include emotions) as motives […] feelings will at times rightly guide decision making. This account of the ethical role of feelings is integral to the Grisez School's conception of ethics as centrally about the formation of character; an understanding which, of course, also lies at the heart of virtue ethics.[651]

This view puts Black at odds with Finnis who—as we have seen—regards allowing one's emotions sway over one's reasons for action as the archetypal moral trespass, attributing this position to Aquinas.

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[647] Bexell, 'Is Grisez's Moral Theology Rationalistic?', p. 133.

[648] Bexell, 'Is Grisez's Moral Theology Rationalistic?', p. 133.

[649] Bexell, 'Is Grisez's Moral Theology Rationalistic?', p. 136.

[650] Bexell, 'Is Grisez's Moral Theology Rationalistic?', p. 140.

[651] Black, 'Introduction', p. 21.

To summarise: Jean Porter argues that the Grisez School justify their reconstruction of the natural law and their analysis of practical reasoning on the basis that it is necessary to construe practical reason as functioning in this way, this being the only way to avoid fallacious reasoning from metaphysical or anthropological facts to normative conclusions. Porter herself finds no compelling justification for any such reconstruction, since she denies the existence of the alleged gulf between the realms of fact and value. In addition, Porter finds the Grisez School view of practical reason counterintuitive, running contrary to our experience of the way in which we reason morally, and unpersuasive as an interpretation of Aquinas. She identifies the stance taken by the Grisez School on the question of the naturalistic fallacy as necessitating a reworking of the traditional Catholic prohibition on the use of contraception, such that conservative Catholics like Grisez, who continue to defend the doctrine, do so on a different basis to that expounded in the relevant magisterial documents. An important point of agreement between Porter and Grisez is found in their rejection of biologism and their shared intuition that a theological natural law ethics must begin with reflection on the meaning of human flourishing and their identification of Aquinas's work as foundational for such reflection. However, for Porter, Grisez makes claims for the self-evidence of the basic goods and their internal specification that she finds implausible and distinct from the superficially similar claims made by pre-modern writers. She concludes that unaided reason cannot do the work Grisez requires of it: hence she rejects what she sees as Grisez's Kantian rationalism and pursues a naturalist approach to the revival of natural law.

Other scholars who have critiqued the new natural law as deontological and detached from nature as in any sense normative have included Michael Northcott, as we saw in Chapter Four, as well as Pamela Hall, Henry Veatch, Russell Hittinger, Lloyd Weinreb and Ralph McInerny. Responding in defence of the Grisez School position, Robert George and Rufus Black argue that the theory is 'grounded in nature' in the sense that the basic goods are dimensions of the flourishing of human persons who have a particular nature: different goods would be arrived at following Finnis's reflective methodology if we were self-reflective creatures with a somewhat different nature. However it is important in the light of their understanding of the naturalistic fallacy that moral norms and basic goods are not in any sense *derived* from the facts of human nature.

For Bexell, the chief inadequacy of Grisez School ethics is its failure to accommodate moral data provided by our emotions into ethical analysis. On his view, this makes the theory *rationalistic*. Finnis's view that following emotion rather than reason is the paradigmatic way of going and doing wrong for Aquinas, which as we have seen Porter disputes, would seem to lend weight to this analysis. However, Rufus Black argues that our emotional lives are integrated into ethical decision making in Grisez's theological ethics, which he construes as a form of virtue ethics with an understanding of Christian character close to that of Stanley Hauerwas.

Discussion

Thomism

Although it is beyond the scope of this thesis to adjudicate between Porter and Finnis on issues of Thomist scholarship, it seems clear that Grisez consciously departs from Thomist teaching on the ultimate good and Finnis's reading of Aquinas is called in question on several points. However, although differences in the theoretical substructure of the new natural law have led to differences in argument in defence of contraception between Grisez and the Magisterium, suggesting that such discrepancies may have important ramifications at the level of applied ethics, Chapter Four of this

thesis has clearly shown that a deficit in Thomist authenticity, although it needs to be acknowledged, has not led to an impoverished treatment of the environment in Grisez's work.

In so far as the Vatican continues, as McInerny tells us,[652] to recommend St Thomas as our mentor in theology and philosophy, and to employ his moral reasoning in doctrinal development, it may be that Porter's ethics provides us with a clearer, less distorting lens through which to view the future developmental possibilities inherent in Catholic social teaching. However, unless Porter is right in supposing that the Grisez School ethical system is simply unworkable, the new natural law as *sui generis* stands as a valuable resource for environmental ethics and, with suitable caveats attached, as a predictive tool for future Vatican teaching in the context of our ecological crisis.

Universalism

In my view a major flaw in Porter's critique of Grisez's ethics is her tendency to overlook the cogency of his theological ethics in light of difficulties she identifies with the universalist ambitions of his secular ethical system. At times she seems to conflate Grisez's two accounts of natural law, or to mistake his secular system for the new natural law *tout court*. This seems to me to account for her worry that Grisez's ethics is unworkable. In his theological ethics, practical reason works in concord with a biblical vision of Christian character, which remediates the cracks and strains Porter rightly diagnoses as a feature of Grisez's secular ethical edifice. Hence his theological ethics can stand alone as a coherent system that does not rely on implausible claims for the self-evidence of the modes of response. As I read him, Grisez works backwards from his moral theology to the secular modes of responsibility, such that they remain reliant on his Christian virtue ethics.

I think Biggar is correct in his observation that the 'requirements of practical reasonableness' only appear reasonable in the light of Christian faith and hope. Our culture is so deeply imbued with Christian ethical assumptions that they are easily overlooked. On my reading, Grisez assumes a Christian view of virtue and thus fails to see that different 'modes of responsibility' could arise from conflicting traditions of virtue ethics, undermining their claim to secular universality. On the other hand Grisez's *theological* ethics, legitimately moored in a biblical understanding of Christian character, offers a self-consistent and convincing rational system. However as a species of theological virtue ethics, Grisez's theory cannot of course be classified as a 'natural law' theory under Bexell's definition. Taken in this sense, it seems to me, Porter is correct in her criticisms of the new natural law, but she is wrong to overlook the virtues of Grisez's theological ethics.

I would agree with Black that two parallel systems can be detected within Grisez's overall work: he expounds a distinctive and cogent theological ethics, grounded in an understanding of Christian character drawn from reflection on the beatitudes, and abstracts from this a secular bridging theory. This secular natural law theory may serve as a useful stand-in, in contexts in which shared commitment to equal human dignity can be assumed, for the ever elusive universal natural law. It is not in itself universally valid and intellectually compelling, since, as Porter says, our understanding and assessment of natural law moral norms depends on the theory of human nature that we bring to bear on them, and no such theory of human nature can expect to be so well substantiated as to be rationally compelling to everyone who understands it.[653] Furthermore, as Black argues, the requirements of practical reasonableness arise, in part, from a person's understanding of the

[652] Ralph McInerny, 'Grisez and Thomism', p. 53.

[653] Porter, 'Does the Natural Law Provide a Universally Valid Morality?', pp. 90–91.

'conditions of human life', which would include our theological understanding of questions of ultimate meaning.[654] However, I would suggest, Grisez's ethics has great potential as a contributor to the project that Biggar, O'Donovan, Porter and others hold out hope for in the face of the kaleidoscopic fragmentation and multiplication of ethical particularism: A global ethic we might jointly construct rather than hope to discover or presume to teach.

Rationalism

For Porter, the distorted account of practical reasoning advanced by the Grisez School is a consequence of their attempts to evade the is-ought problem that dominated much of Twentieth century ethics. On her view this supposed fallacy is an artefact of Modernism rather than a timeless truth of logic as Grisez and his collaborators take it to be. At times it seems to me that defenders of the Grisez School position and their interlocutors are talking at cross purposes on this crucial issue. I agree with Robert George that there is no warrant for regarding the new natural law as epistemologically enclosed or somehow ungrounded in nature. Yet I also agree with Henry Veatch, Jean Porter and others who have argued that there is no chasm between the natural and the normative necessitating a complete reconstruction of natural law theory.

To flourish is to instantiate human perfections; but human perfections belong to our nature as it *ought* to be, as it was in the garden of Eden and *is* now only insofar as we are enabled by grace to live in accordance with the natural law. This, it seems to me, robs George's riposte to Veatch of all its logical force. For George and for the Grisez School, for whom he is an able and articulate spokesperson, the distinction between what 'is the case' about human nature and what 'ought to be' is logically significant. Veatch claims that the very *is* of human nature has an *ought* built into it, a claim George dismisses as muddled. Yet, on his own account, the basic goods as human perfections belong to human being as part of their nature. Although as a legal scholar he does not express this theologically, another way of expressing the same point would be that the *is* of our original created nature, without sin and in the image of God, has an *ought* built into it, functioning as it does as the ideal of wellbeing, fulfilment or human perfection to which we aspire, enabled by grace, when we commit ourselves to discipleship in response to the love of Christ.

So in answer to the question as to whether Grisez's ethics should be disqualified as a theory of natural law by reason of its detachment from nature as its normative foundation, my response would be no: as George has shown, Grisez's moral theology is grounded in nature and in this sense the theory qualifies as a species of natural law. In my view, Grisez's neo-Thomist critics overstate the rationalism of his ethics, since, as I read him, a biblical Christian virtue ethics underpins the modes of response. Both Biggar and Black corroborate this interpretation of Grisez's moral theology. The secular modes—which are certainly far from self-evident—appear to have been arrived at by abstraction from the theological worldview within which they fit together into a coherent but irreducibly Christian ethical system.

On the second issue, whether the new natural law is rationalistic by virtue of excluding emotional data from ethical analysis, I would agree with Black that this is simply not the case for Grisez's theological ethics. One possible reason for the different perception between Black and Bexell is that the former is interested exclusively in Grisez's theological ethics whereas the latter seeks a universalist ethics in Grisez's work. Similarly, John Finnis, as a scholar of jurisprudence rather than

[654] Black, 'Is the New Natural Law Christian?', p. 154.

theological ethics, necessarily looks to Grisez's secular version of the natural law in constructing his own worldview. It is noticeable that the secular formulation of Grisez's modes of responsibility is negatively phrased and preoccupied with overcoming emotional drivers that might lead to immoral choices. By contrast, the Christian modes of response incorporate positive emotions such as gratitude for salvation as the motive for honouring the same injunctions not from obedience to rules but as charity's application of faith in the Christian life.

In my view, Bexell is mistaken in expecting to be able to discover a universal ethics and his attempt to avoid the trap of rationalism through a dialectical balancing of philosophical and psychodynamic strands of ethical thought seems likely to result in unworkable complexity. He also seems to me to overlook the positive role of emotion in Grisez's moral theology as well as the psychologically deep-rooted self-esteem of a Christian who understands herself as a child of God and the moral shield this conviction provides, although, of course, she remains subject to bad habits and temptations as a convert on the path to spiritual and moral maturity.

Notwithstanding the evident inadequacies of any universalist ethics which one might attempt to abstract from Grisez's system, it seems to me that his theological ethics can respond robustly to the charge of rationalism, both in Bexell's sense and in Northcott's. The Christian virtue ethics that underpins Grisez's modes of response to the Christian calling and his treatment of personal vocation evidences a positive incorporation of emotion as morally cognitive and not merely as primordial impulses to be restrained, a characterisation that permeates Grisez's formulation of the secular modes. Likewise, it seems to me that the rationalism Northcott and Porter, *inter alia*, perceive in Grisez's natural law is an artefact of his occasional forays into secular ethics and his attempts to reconstruct the universalist ideal following the failure of the Enlightenment project aimed at this chimeric end. By contrast, his theological ethics radically depends on a broader Christian worldview and hence is not a freestanding rationalist construction. As I read him, Grisez's moral theology, whilst it does not claim to be an authentic recovery of the thought of Thomas Aquinas, nevertheless qualifies as a natural law theory, providing universalism is not a defining feature of such a theory as it is for Bexell, since its critics overstate the extent of the theory's rationalistic character.

The conclusion that Grisez's theological ethics qualifies as a natural law theory brings us back to Nigel Biggar's question with which we began this chapter: does the Grisez School ethical system suffer from a serious deficiency, which a naturalist system might remediate? As we have seen in Chapter Four of this thesis, Grisez in fact expounds a sophisticated environmental ethics that on the practical level leads to many of the same conclusions that environmentalist scholars have argued for. Much of this is the fruit of his dialectical methodology which requires conscientious reflection on the truths of Scripture and existing Catholic social teaching. This wealth of received wisdom Grisez seamlessly interweaves with his natural law ethics to produce a holistic theology of the Christian moral life. Thus, on my reading, it is not possible to detach Grisez's inherent ecology from his theological ethics without doing structural violence to his ethical system. This conclusion dovetails with the finding of this chapter that the alleged rationalism of the Grisez system on the theoretical level is overstated by critics, which gives me confidence that the Grisez School environmental ethics I have sought to recover can be an important and timely contribution to the field.

Conclusion

This chapter has argued that, notwithstanding its departure from classical Thomism and the inherent weakness of the secular universalist strand of thought woven through it, Grisez's moral theology

stands as a cogent ethical system that is apt for application to our ecological challenges. As Biggar and Black have argued, Grisez's ethics stands on theological foundations even when he attempts to abstract and present a system that is accessible to all rational people of good will. If the term 'natural law' implies, as it does for Bexell, a universally valid freestanding edifice constructed from pure secular reason, then it would seem that Grisez's theological ethics is not a form of natural law and, in so far as he aspires to present such a theory, his 'natural law' project is unsuccessful. However if a natural law project requires only that the theory be grounded in nature, George and Black have successfully shown that the goods that together constitute human flourishing would be different were our nature other than it is, since they correspond to the reality of our nature as we experience it. Black has also shown that, for the Grisez School, emotions and the moral data they provide have an important role to play in Grisez's moral theology. Hence the new natural law is not rationalist in either of these two senses and there is no case to answer on whether or not the alleged rationalism impairs its potential for application to the ecological crisis. For the purposes of this thesis, then, we can answer Biggar's question in the negative. There is no theoretical flaw in Grisez's theological ethics that disables it as a vehicle for environmental ethics. On the other hand, it may be that a sound grasp of Porter's theoretical ethics, combined with Grisez's ecological theology could equip us with an even more powerful predictive lens through which to speculate on how Catholic social teaching might develop in our context of ecological crisis. My next and final chapter summarises the findings of the thesis and concludes the project with some suggestions for future research.

Chapter 6: Conclusion and proposals for future research

Introduction

The aim of this chapter is to abstract the salient conclusions from the foregoing chapters to provide an overview of the whole project and the route taken in establishing the thesis. We will then look forward to a continuation of the wider project of theological engagement with the ecological crisis with a few thoughts on the possibilities for future research followed by a general conclusion to the project.

Recapitulation

Chapter One introduced this research project, beginning with my research question 'how might Germain Grisez's creation theology and theological ethics contribute to Roman Catholic responses to the climate challenge?' Following a brief description of the personal context in which my interest in this research topic was sparked, I outlined the contribution of this research project to the field of Roman Catholic ecotheology and summarised the argument of the thesis. This was followed by a brief summary of the task of each chapter.

The aim of Chapter Two was to build my argument for pursuing this particular research project; the task of Chapter Two was threefold. Section One sought to demonstrate that the scientific case for anthropogenic global warming is robust. Section Two argued that the scale of the challenge requires broad participation by the general public in the transition to a low-carbon economy, requiring a paradigm shift away from the highly technical and negative framing of the debate towards a positive vision that engages people at the level of faith and values. Section Three set the scene for the particular project undertaken in this thesis, arguing that the climate challenge is a 'sign of the times' in principle as this term is understood and employed in Catholic theology and that it has been accepted as such by the teaching authority of the Church.

Chapter Three placed this research project in the context of the field to which it makes its original contribution: Roman Catholic ecotheology. Section One argued that doctrinal revisionism is not intrinsic to the enterprise of ecotheology and Section Two deconstructed the 'dominant narrative' of a 'greening of the papacy' arguing that the resources exist within current teaching for a theologically conservative doctrinal development towards embracing inherent value in nature. Such a development would not threaten central pillars of Catholic social thought such as the unique dignity of the human person. Chapter Three concluded that there is room in the field for a theologically conservative Grisez-School ecotheology, thus establishing the need for this research project to fill an important gap in the literature in this field of scholarly endeavour.

In Chapter Four I established that the architecture of Grisez's theological ethics is inherently green and is built on a foundation of integral ecology. This observation appears to have been overlooked both by Grisez's disciples—who are notable by their absence from public debates on environmental issues—and by his environmentalist interlocutors who seriously mischaracterise his position. In conjunction with my constructive work on a Grisez School conception of climate justice and my application of his methodology to the new encyclical, this conclusion constitutes a novel and important contribution to the field of Grisez scholarship.

Chapter Four was sub-divided into three sections. In Section One I provided an exposition of Grisez's thought on work, nature and property, followed by a discussion of the ecological implications of his thought on mission and vocation and the framework of his natural law, demonstrating that his theological ethics is dependent on an integral ecology. In Section Two, I analysed and critiqued two important environmentalist responses to Grisez School natural law, arguing that Grisez's environmentalist critics have been too quick to dismiss the potential of his theological ethics as a framework for constructive engagement in environmental ethics and public policy issues related to the ecological challenges of the Anthropocene. In Section Three I applied principles gleaned from my study of Grisez's theological ethics to three contested dimensions of climate justice, concluding with a reflection on *Laudato Si'* from a Grisez School perspective.

Chapter Five discussed critiques of Grisez's reconstruction of natural law developed by Ralph McInerny and Jean Porter, two of his most prominent Thomist critics. We saw that Grisez concedes that his theory departs from authentic Thomism on the question of supernatural happiness, and that Finnis's interpretation of Aquinas is the subject of ongoing academic debate on a number of important points. However, whilst Porter's solution to the naturalistic fallacy provides an alternative route to the recovery of natural law that may be closer to the Thomist legacy, I argued that Grisez's theological ethics as *sui generis* remains a theologically cogent species of ethical realism and, as such, can and should raise its voice in contemporary environmental debates.

Overall, this thesis has argued that the scientific reality of climate change and the enormity of the task of decarbonising the world economy in order to face up to this defining challenge of our times suggests in principle that this issue meets the criteria of a 'sign of the times' as the term is used in Catholic social teaching and in fact the crisis has been recognised as such within a long-standing and well developed corpus of Church teaching prior to, and now of course including, Pope Francis's ecological encyclical *Laudato Si'*. Although a large body of literature on global warming exists in the field of ecotheology, this thesis identifies a gap in the literature for a conservative Catholic methodological approach, seeking to fill this by recovering Germain Grisez's thought on the environment and applying it to the concept of climate justice. Hence this thesis argues for a re-reading of Grisez's theological ethics through the lens of his creation theology, in which light his natural law is seen to be established on the bedrock of integral ecology. For certain Christian opponents of environmentalism who share Grisez's concerns over the possible undermining of unique human dignity and also for Grisez's environmentalist critics, anthropocentrism is a key issue. Yet this thesis argues that Grisez's Catholic anthropocentrism is sufficiently nuanced to sustain a compassionate ethics of creation care and the attribution of inherent value to other species, making Pope Francis's move to embrace inherent value in *Laudato Si'* a significant development but one anticipated by Grisez. Applying Grisez's theological ethics to the climate challenge, this thesis argues for a more ambitious and compassionate conception of climate justice than that articulated by Posner and Weisbach, demonstrating that Grisez's environmentalism and his treatment of traditional Catholic teaching on the common good and the universal destination of goods warrants such a move. Notwithstanding Jean Porter's critique of Grisez's new natural law, this thesis argues that, whilst his ethics departs significantly from traditional Thomism and he falls short of articulating a secular universalism, Grisez's theological ethics nevertheless provides us with a coherent moral system, organised around a Biblical reflection on Christian virtue, that is a substantial resource for engaging with the ethics of climate change and other environmental issues.

Having thus established my thesis that Grisez's thought on the environment reveals an integral ecology that pervades his theological ethics and provides useful insights in the context of climate change, it remains to propose some suggestions for future research before closing this project with a general conclusion.

Proposals for Future Research

Germain Grisez and the ecological challenges of the Anthropocene

In the light of the recovery of Grisez's thought on the environment and the rereading of his theological ethics proposed by this thesis, there is much scope for the application of a Grisez School analysis to other aspects of the ecological 'elephant in the room', including the collapse in biodiversity, distribution of water resources and the threat multiplier effect that links climate change to conflict. There is work to be done on an authentic Catholic construction of animal rights, given the weakness of Grisez's position on this issue as highlighted in this project. The ethics of consumption from a Grisez School perspective proved fascinating whilst I was researching the connections between his ethics of work, nature and property, and this aspect of his work—much like his environmental ethics—seems underappreciated and tends not to be a feature of Grisez School engagement in public discourse. A project of this magnitude and scope would benefit from a collaborative approach, inviting established experts on the various topics pertaining to the ecological crisis to reflect on their own research interests in the light of Grisez's ethics. A sequel to Nigel Biggar and Rufus Black's edited volume of essays might be a possible outcome of such a project, deepening theological engagement with Grisez's thought on the environment beyond the glimmerings of hope for such an enterprise that briefly seemed to spark in that volume, notwithstanding Michael Northcott's—in my view—unfairly negative appraisal of the potential for ecological engagement with Grisez School ethics.

Reflection and action on *Laudato Si'*

Pope Francis's new environmental encyclical, *Laudato Si'*, provides a profoundly hopeful vision of ecological conversion at every level in society and stresses that each of us has a role to play in the transition to climate security. The threefold challenge for theologians is firstly to reflect on the content of the encyclical through the window of our individual expertise and perspective, secondly to build up a more comprehensive appreciation of *Laudato Si'* through sharing our insights and reflecting on the contributions of others and, thirdly, to extend Pope Francis's invitation to engage in an inclusive conversation about the ecological challenges facing our world to others in our parishes and social networks, facilitating the connections that will enable practical responses to the challenge.

CAFOD have produced an introductory DVD on the encyclical for use in parishes which includes input from a number of theologians. However, given the breadth of material covered in *Laudato Si'*, there is a need for a deeper, more sustained reflection that systematically mines the treasures of the encyclical, focusing on different issues and theological perspectives. My proposal is to invite colleagues to contribute to a project that assembles a series of short reflections, much like the TED talks series, that could be used as the basis of a parish-based course with some similarities to the ALPHA model that has been successful in Evangelical contexts, but with a view to identifying ecological projects and activities that participants have the enthusiasm to take forward. As Anthony Giddens remarks, 'one hundred books on one hundred ways to reduce your carbon footprint will

have less effect than just one that is geared to what people are positively motivated to do.'[655] In order to write that book, we need to 'do theology' as a community, reflecting on the ecological crisis and building parish-specific community projects that reflect local expertise and enthusiasm. Different churches might have a vision for quite different transition initiatives, but building bridges to secular sustainability projects and sharing best practice and success stories can help enthuse others and facilitate new ways of actualising the ecological vision of *Laudato Si'.*

Ecumenical perspectives on integral ecology: towards an Anglican ecological theology

According to Malcolm Brown, Director of Mission and Public Affairs for the Archbishop's Council of the Church of England, 'a number of trends seem to be coming together, in the Church and in the academy, which suggest a need for (and perhaps a desire to see) a theological foundation for the Church's social witness formulated in terms that work for the Church and Society of today'.[656] Brown predicts that—despite some academic protestations of plurality and informality as characteristic of Anglican social theology—the Church of England is moving closer to the Catholic model of producing official documents[657] (the recent statement 'Who is my neighbour' produced in the run-up to the general Election on May 7th 2015 is a case in point[658]). In view of this trend, Anna Rowlands suggests that the need for a serious consideration of the relationship between the fraternal traditions of Anglican and Catholic social thought is pressing.[659] However treatment of ecological issues as a category is overlooked in Brown's edited volume *Anglican Social Theology*. Bringing together Evangelical and Anglican thinking in ecotheology and relating it to Catholic social teaching would constitute a useful contribution to a relatively new but promising field of research.

Energy futures

The ethics of future fuels is a fascinating and complex field of study, with the links between bio-fuel production and food security a particularly troubling nexus. Given the proportion of total global fuel consumption required to keep the commercial air fleet flying and the likely recessionary impact of restrictions on global mobility, it seems inevitable that a carbon-free alternative for jet fuel will need to be part of the solution to our climate and energy resource challenges. The question is how to design a regulatory framework and incentives to bring new fuels to market within the required timeframe without adversely affecting food security for the global poor in a food for fuel switch. There is an urgent need for theological reflection on this and other aspects of the fuel revolution from a perspective that holds together the human and ecological dimensions of the problems we face.

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[655] Giddens, *The Politics of Climate Change*, p. 113.

[656] Malcolm Brown, 'The Case for Anglican Social Theology Today' in: *Anglican Social Theology* edited by Malcolm Brown with Jonathan Chaplin, John Hughes, Anna Rowlands and Alan Suggate (London: Church House Publishing, 2014) pp. 1–27, p. 2.

[657] Malcolm Brown, 'The Church of England and Social Ethics Today', *Crucible* July–Sept. 2011, pp. 15–22.

[658] House of Bishops, The Church of England, 'Who is my neighbour? A Letter from the House of Bishops to the People and Parishe of the Church of England for the General Election, 2015. https://churchofengland.org/media/2170230/whoismyneighbour-pages.pdf [accessed 21 October 2015]

[659] Anna Rowlands, 'Fraternal Traditions: Anglican Social Theology and Catholic Social Teaching in a British Context', in: Brown, Malcolm, Jonathan Chaplin, John Hughes, Anna Rowlands and Alan Suggate (eds.) *Anglican Social Theology*, (London: Church House Publishing, 2014), pp. 133–174, at p. 133.

Transition theology

In *Transition Movement for Churches*,[660] Timothy Gorringe and Rosie Beckham argue for a closer collaboration between the Church and 'transition town' projects that aim to engage ordinary concerned citizens in the shift towards sustainable consumption and renewable energy systems. Yet in 'Come with me into the fields: inspiring creation ministry among faith communities' Erin Lothes Biviano argues that 'the central symbols of Christian faith are not yet consciously intertwined with the reality of climate change in the ways needed to summon strong action.'[661] It would seem that there is much work to be done in translating high level theology into projects for community participation, and reflecting on transition projects as a way of doing theology democratically in the community.

A network for reflection on climate change adaptation

There is a need to build an ecumenical network for theologians interested in different aspects of the ecological challenge, and those working in climate vulnerable communities whose experiences might form the contextual origin for theological reflection. At the same time, such a network would be a source of local knowledge about the needs of climate refugees and other vulnerable communities to enable Churches to partner effectively with organisations and individuals imperilled by climate change and an opportunity for sharing best practice in adaptation strategy to build resilience.

General Conclusion

This thesis began with my personal story about climate change and my concern for vulnerable people in Zimbabwe. At the time of going to press the 'hunger season' has begun and aid agencies are warning that the 2015 El Niño event, super-charged by climate change, threatens food security across Africa and beyond.[662] There have been conflicting reports concerning Government plans for permanent settlement of the Tokwe-Mukosi flood victims and some sources claim that food rations for the refugees have been terminated, with tragic consequences for children who drop out of school to help forage for food and especially for teenage girls whose families often sell them for marriage in order to survive.[663] The Italian engineers involved in the construction of the Tokwe-Mukosi dam have downed tools in a dispute with the government over non-payment for their work, and without private investment which the government has yet to secure there seems no prospect of the dam being completed. In an already extremely arid area made more inhospitable by global warming and increasingly erratic rainfall in a changing climate, irrigation and hydro-electricity from the dam held out the possibility of an agricultural renaissance in Masvingo and was a central plank in Zimbabwe's climate change adaptation strategy. It is hard to hold on to hope for the future.

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[660] Tim Gorringe and Rosie Beckham, *Transition Movement for Churches* (London: Canterbury Press, 2013).

[661] Erin Lothes Biviano, 'Come with me into the fields: inspiring creation ministry among faith communities', *New Theology Review*, 26: 2, (2014), pp. 33–42. http://newtheologyreview.org/index.php/ntr/article/view/998 [accessed 21 October 2015].

[662] Oxfam Media Briefing, 1 October 2015: Entering Uncharted Waters: El Nino and the threat to food security. https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/mb-el-nino-uncharted-waters_1.pdf [accessed 9 November 2015].

[663] Regerai Pepukai, 'Zimbabwe girls sold for marriage as hunger bites', 2 November 2015. http://cajnewsafrica.com/2015/10/30/exclusive-zimbabwean-girls-sold-for-marriage-as-hunger-bites/ [accessed 9 November 2015].

In this situation of great grief and tragedy, Grisez's theology and environmental ethics provides a framework for constructive reflection and action. His stress on the tradition of the universal destination of goods, the absolute Christian duty to feed the hungry and the special responsibility we have towards those adversely affected by the actions of our own community, speaks of the need to assist the climate refugees as an immediate response of solidarity and compassion. Many of the non-governmental organisations with disaster management expertise have withdrawn from the Masvingo area, citing difficult and dangerous operating conditions, but we have established links with Action Aid Zimbabwe who are able to work through partners on the ground to set up a child sponsorship scheme and facilitate donations of food, medical supplies and school equipment. This is just one example of a small church community attempting to live consistently with the Catholic principles Grisez articulates, in circumstances in which a personal connection enables a direct response to a situation of desperate need. The larger challenge for aid agencies is to facilitate many such connections so that every parish is enabled to respond in solidarity to instances of global climate injustice.

In the Catholic context, Grisez's theology encapsulates a radical conservativism that in no way waters down the challenge of living consistently with traditional Catholic principles, but stresses the obligation in strict justice to use one's wealth to meet others' needs. The traditional concept of the universal destination of goods is the foundation stone of Grisez's thought on property, in the light of which property is held for the common good, to be used to meet one's own reasonable needs as well as those of dependants and others including destitute strangers, to whom a strict duty to provide emergency food-aid is owed. Warning against a tendency to rationalise evasions of this responsibility, Grisez comments:

> For an individual to fulfil this obligation will neither change the world nor solve the problem of poverty, but it will make a difference to each person he or she helps—a real person whose real misery really will be mitigated. Even though the mass of human misery will be reduced only infinitesimally, that will be of immeasurable value because of the immeasurable dignity of each person whose need is met […] Christians who use their wealth to meet other's needs bear credible witness to the gospel—witness which might contribute to effective political action to implement plans for the economic justice which the Church's social doctrine calls for. [664]

The radical implications of Grisez's conservativism are evident throughout his treatment of property which stands as an indictment of wasteful consumerism and flatly contradicts the individualist idea of absolute property rights now endemic in our culture. Grisez goes so far as to justify state expropriation of property where it is abused by private owners to the detriment of the common good. Challenging the prevailing culture of waste, Christians should acquire only such property as is needful for their pursuit of flourishing in the context of their vocation. Owners have a duty to care for and conserve their property and to ensure that their capital investments are ethical. In order to live consistently with the tradition, guided by Grisez's exposition of its principles, Christian communities need to develop a counter-culture of simple living and build networks of lending and sharing. In so doing we will strengthen the bonds of community and enable the church to reach out to others and care for the environment.

As we have seen, Grisez's detractors find his ethics to entail an ecologically malignant anthropocentrism, but for Grisez there is no incompatibility between a concern for human well-

[664] Germain Grisez, *Living a Christian Life*, p. 813.

being and the recognition of and care for the intrinsic value of the non-human world. Despite his opposition to animal rights, which leaves him without a philosophical basis for objecting to cruelty to other animals in the pursuit of human interests, overall Grisez's creation theology provides encouragement to those who seek to raise standards of animal welfare and work for the protection of endangered species. Although his rejection of the idea that animals have rights entails, for Grisez, that they may be killed, harmed or caused pain to the extent necessary for any good human use, he condemns cruelty, negligence and irresponsible ownership and derives extensive duties of protection, kindness and care towards animals. His sympathetic treatment of the need to reduce meat consumption is important in a climate constrained world in which vegetarianism can be a legitimate Christian response to climate change and food security issues as well as animal welfare considerations.

At the time of writing, world leaders are gathering in Paris for the crucial COP21 climate conference. Grisez's thoughts on fair burden-sharing and historic responsibility and the duty to aid others adversely affected by actions of one's own community provide us with an ethical framework for our climate justice advocacy. However it should be noted that he does not provide a rationale for apportioning the remaining carbon budget on an equal per-capita shares basis, which for some is the benchmark for climate justice. The 'solution space' available for a reasonable chance of complying with the two degree guardrail lies somewhere between what Peters and co-authors call the 'inertia curve' and the 'equity curve' which are two extremes on the spectrum of concepts of climate justice.[665] Posner and Weisbach's idea of a forward-looking parallel abatement model that disregards historic responsibility and differentiated capacity tracks the inertia curve, with models such as Aubrey Meyer's Contraction and Convergence[666] and the Greenhouse Development Rights Framework[667] falling somewhere between the two curves—in the latter case depending on the choice of indices for capacity and responsibility. It is well known that the 'Paris pledges' made by governments fall outside the solution space and some mechanism both for ratcheting up the level of ambition in the future and for compensating the most vulnerable nations will be needed to design a workable agreement that is both fair and adequate to the task. It may be that in the United States at least, where his work is very influential, a Grisez School framework for climate justice might motivate both an increase in ambition and a renewed sense of solidarity with the vulnerable global poor. In addition, his support for global institutions and governance structures, alongside that of Pope Francis in *Laudato Si'*, might temper a strong sense of absolute national sovereignty amongst American Catholics. Overall, Grisez's important work on environmental ethics which this thesis has sought to recover may act as a corrective to the widespread view that environmentalism is not a conservative Catholic issue and help to bring a new and constructive perspective to bear in conversations concerning Christian ecological responsibility as we seek to read the signs of the times and respond in faith to the challenges of the Anthropocene.

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